

<210> 61
 <211> 1705
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (779)
 <223> n equals a,t,g, or c

<400> 61
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<210> 62
 <211> 1031
 <212> DNA
 <213> Homo sapiens

<400> 62
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SUBSTITUTE SHEET (RULE 26)

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<210> 63

<211> 1589

<212> DNA

<213> Homo sapiens

<400> 63

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<210> 64

<211> 1088

<212> DNA

<213> Homo sapiens

<400> 64

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<210> 65

<211> 1256

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (1079)

<223> n equals a,t,g, or c

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<210> 66

<211> 1602

<212> DNA

<213> Homo sapiens

<400> 66

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<210> 67

<211> 938

<212> DNA

<213> Homo sapiens

<400> 67

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<210> 68

<211> 1585

<212> DNA

<213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

<220>

<221> SITE

<222> (904)

<223> n equals a,t,g, or c

<400> 68

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<210> 69

<211> 1676

<212> DNA

<213> Homo sapiens

<400> 69

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<210> 70

<211> 1344

<212> DNA

<213> Homo sapiens

<400> 70

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aaaaaaaaaa	aaaaaaaaaa	aaaa				1344

<210> 71

<211> 1474

<212> DNA

<213> Homo sapiens

<400> 71

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<210> 72

<211> 2012

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (1468)

<223> n equals a,t,g, or c

<400> 72

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<210> 73

<211> 1267

<212> DNA

<213> Homo sapiens

<400> 73

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<210> 74

<211> 1748

<212> DNA

<213> Homo sapiens

<400> 74

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<210> 75

<211> 1570

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (10)

<223> n equals a,t,g, or c

<400> 75

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40

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<211> 524

<212> DNA

<213> Homo sapiens

<400> 76

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<210> 77

<211> 1306

<212> DNA

<213> Homo sapiens

<400> 77

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gccaccgccc	tgggatctct	gaaaaggagg	tttcagccac	gaggcagctg	cttccaggac	1140
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<210> 78

<211> 1479

<212> DNA

<213> Homo sapiens

<400> 78

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<210> 79

<211> 1794

<212> DNA

<213> Homo sapiens

<400> 79

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<210> 80

<211> 1280

<212> DNA

<213> Homo sapiens

<400> 80

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<210> 81

<211> 974

<212> DNA

<213> Homo sapiens

<400> 81

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<210> 82

<211> 1955

<212> DNA

<213> Homo sapiens

<400> 82

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<210> 83
 <211> 638
 <212> DNA
 <213> Homo sapiens

<400> 83
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<210> 84
 <211> 859
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (27)
 <223> n equals a,t,g, or c

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 <213> Homo sapiens

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<210> 86

<211> 2674

<212> DNA

<213> Homo sapiens

<220>

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<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (2611)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (2621)

<223> n equals a,t,g, or c

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<221> SITE

<222> (2634)

<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<222> (2669)

<223> n equals a,t,g, or c

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<210> 87

<211> 1636

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

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<222> (1624)

<223> n equals a,t,g, or c

<400> 87

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<210> 88

<211> 1639

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> n equals a,t,g, or c

<400> 88

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gtggagcctg	ggcttcacag	tgacactcac	gtttgaactc	ccggtcggct	gtgtgcttgg	240
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cccctgcagg	accgagatga	tgtccaatga	caagccctgg	cttccagcca	atgctcctgc	360
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<210> 89

<211> 1860

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (1846)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (1848)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (1853)

<223> n equals a,t,g, or c

<400> 89

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<210> 90

<211> 839

<212> DNA

<213> Homo sapiens

<400> 90

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<210> 91

<211> 1145

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (386)

<223> n equals a,t,g, or c

<400> 91

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acctccaagt	tattttttcca	accaaccttc	tttgaaaaat	cttgatgag	tcactcaaat	360
caagacatgt	tataaaatta	tctgtnatth	tggtagaaca	tatacattgt	yctaataata	420
atttycaaat	attcagtgka	acygtaagka	tgagaatata	ggttgaaat	cycttatcca	480
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<210> 92

<211> 2050

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (515)

<223> n equals a,t,g, or c

<400> 92

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<210> 93
 <211> 1173
 <212> DNA
 <213> Homo sapiens

<400> 93
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 <211> 822
 <212> DNA
 <213> Homo sapiens

<400> 94
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<210> 95
 <211> 1077
 <212> DNA

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<213> Homo sapiens

<400> 95

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<210> 96

<211> 2092

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (637)

<223> n equals a,t,g, or c

<400> 96

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<210> 97

<211> 1352

<212> DNA

<213> Homo sapiens

<400> 97

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aaatgccaaa	gacttgcctt	ccaattctct	gtctacctct	aactcaggct	gttgtcttgg	180
cacagttaaa	caacttttct	agcctcaata	ttttcatctt	caaaatcaaa	aataaaatgt	240
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<211> 913

<212> DNA

<213> Homo sapiens

<400> 98

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<210> 99

<211> 721

<212> DNA

<213> Homo sapiens

<400> 99

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<210> 100

<211> 645

<212> DNA

<213> Homo sapiens

<400> 100

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<210> 101

<211> 563

<212> DNA

<213> Homo sapiens

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aatccgtgaa	atcatgcctg	taaagcccaa	acatttTgtaa	caaactccct	aataaattta	480
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<210> 102

<211> 1324

<212> DNA

<213> Homo sapiens

<400> 102

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<210> 103

<211> 1731

<212> DNA

<213> Homo sapiens

<400> 103

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<210> 104

<211> 1466

<212> DNA

<213> Homo sapiens

<400> 104

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 <211> 1303
 <212> DNA
 <213> Homo sapiens

<400> 105
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<210> 106
 <211> 1516
 <212> DNA
 <213> Homo sapiens

<400> 106
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58

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<210> 107

<211> 1689

<212> DNA

<213> Homo sapiens

<400> 107

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<211> 1943

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (161)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (1926)

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<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (1928)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (1934)

<223> n equals a,t,g, or c

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<210> 109

<211> 1594

<212> DNA

<213> Homo sapiens

<400> 109

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<210> 110

<211> 1742

<212> DNA

<213> Homo sapiens

<400> 110

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<211> 1501

<212> DNA

<213> Homo sapiens

<400> 111

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<210> 112

<211> 791

<212> DNA

<213> Homo sapiens

<400> 112

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gacatttttg	gacctgataa	ttttgttgtg	ggctctagcc	tcatgttata	ggagggtttac	240
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<210> 113

<211> 1637

<212> DNA

<213> Homo sapiens

<400> 113

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<210> 114

<211> 1588

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (778)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (1150)

<223> n equals a,t,g, or c

<400> 114

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<210> 115

<211> 1926

<212> DNA

<213> Homo sapiens

<400> 115

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64

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<210> 116

<211> 1063

<212> DNA

<213> Homo sapiens

<400> 116

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<210> 117

<211> 1615

<212> DNA

<213> Homo sapiens

<400> 117

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<210> 118

<211> 1221

<212> DNA

<213> Homo sapiens

<220>

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<222> (697)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (700)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (701)

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<220>

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<222> (712)

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<220>

<221> SITE

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<220>

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<222> (742)

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<210> 119

<211> 1149

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (1120)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (1140)

<223> n equals a,t,g, or c

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 cagaaaaattg acctatgtaa tgaaatacta gaagaaaact cttaaattaga atggctttgt 180
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 cctaaaaatg tgttgatctt gagatcatca tatatgtagt attacagtgc aaacactatt 300
 aatgttaatg aggtagggtg atttttttaa tgaaaaaact tgaaatatta tcagggtgtc 360
 cccattttatg gaatttaagc ttgtcagaaa gatccagata gctatattaa tattttatct 420
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 ggtattccat aaactcaggg aggaaaaaaa aaaaactaag atgagaggct agttataatg 600
 atctttatatt atatattgca ggaaatgatt tctctctca caacttagca taatttactg 660
 ctaatatatt tagccatggg ttgaaaaaaa ttaartgggt ttgtaagtgc taatcctttg 720
 ttactcattt aaactggtaa aatgtagtcc ccgctccctg aggaggacct gtccaaactc 780
 ttcaaacacc cacagccgcc tgccaggatg gactcgctgc tcattgcagg ccagataaac 840
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 caggctcttc aagaatacaa caactaagaa aagggaagtt ccagaaaaga agttaacatg 960

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67

aactcttgaa	gtcacaccag	ggcaactctt	ggaagaaata	tatttgcata	ttgaaaagca	1020
cagaggattt	cttttagtgc	attgccgatt	ttggctataa	cagtgtcttt	ctagccataa	1080
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<210> 120

<211> 1515

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (69)

<223> n equals a,t,g, or c

<400> 120

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caacacgtnt	cccacaaagg	gagcagacac	tgggcttgtg	aagctgcccc	ataccttccc	120
cacagaactg	gggtccggcc	tccctgacat	gcagatttcc	accagaaga	cagagaagga	180
gccagtggtc	atgggaatgg	ctggggctcaa	agactgggtg	cctgggagct	gaggcagcca	240
ccgtttcagc	ctggccagcc	ctctggaccc	cgaggttgga	ccctactgtg	acacacctac	300
catgcggaca	ctcttcaacc	tccctctggc	tgccttggcc	tgcagccctg	ttcacactac	360
cctgtcaaag	tcagatgcca	aaaaagccgc	ctcaaagacg	ctgctggaga	agagtcagtt	420
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tgtactgggc	tatgtcactc	catggaacag	ccatggctac	gatgtcacca	aggtctttgg	600
gagcaagttc	acacagatct	caccggtctg	gctgcagctg	aagagacgtg	gccgtgagat	660
gtttgaggtc	acgggcctcc	acgacgtgga	ccaagggtgg	atgcgagctg	tcaggaagca	720
tgccaagggc	ctgcacatag	tgccctcggt	cctgtttgag	gactggactt	acgatgattt	780
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aaaaaaaaaa	aaaaa					1515

<210> 121

<211> 1025

<212> DNA

<213> Homo sapiens

<400> 121

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tacaaatagg	ttttcttaaa	ccagagatgc	actgcccttg	tctaaagttc	ttattgcaact	180
ggtttatatg	tgtatgtgtg	ttttattgtg	tgttttttta	atttgtaagt	attctaagag	240
tttcctaata	ctaagggtta	aattttcatg	ttgacctgag	ccttttgcaa	atttgctttg	300
gctctattga	tttgtccatt	atgtgttagg	caaataatac	ttaagtggag	ggggaagttt	360

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atgaatataa	tatagctctg	tgttttaaac	ctcagaaaca	gatttgagtg	tttcagtatt	420
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tggttcagta	tttcccacct	acatttctgt	ttggtgacat	tgctcathtt	aacaaatag	540
accgagtcta	gtttttcttt	aaaaggatag	tttatgagta	atctttaaaa	ccatttccat	600
accatctgta	tataaccatt	tcggtagaga	acacactaca	ctgaaccctg	ctttagagct	660
gtgtgttgag	ctaaaaatat	aattttttaa	aaattgacta	gcaaaatcta	tggccacact	720
gagaagcctt	tgaaaatggc	aaatactttt	catcaccaat	tgccaatttc	atctttcttc	780
tgcttctctca	gccttgtagc	aaaggctaca	cagcagccca	cagtccacag	tctttttggg	840
aaaattggcc	tgccaccttc	tttaagctca	gtttattttt	gacttacttt	ctttgctgta	900
gttatgaacc	ttggggcatt	aaaatcccat	ggcaaggagc	ataagagatg	ttctcgtagc	960
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tcgag						1025

<210> 122

<211> 2207

<212> DNA

<213> Homo sapiens

<400> 122

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cagaagccct	gttcatgggt	ggggatattt	tctcgactgc	atggaatcag	aaagaagcaa	180
aaggatggga	aatgcctgca	ttcccttgaa	aagaattgct	tatttcctat	gtctcttctc	240
tgcgcttttg	ctgactgagg	ggaagaaacc	agcgaaccaa	aatgccctgc	cgtgtgtact	300
tgtaccaaag	ataatgcttt	atgtgagaat	gccagatcca	ttccacgcac	cgttcctcct	360
gatgttatct	cattatcctt	tgtgagatct	ggttttactg	aaatctcaga	agggagtttt	420
ttattcacgc	catcgctgca	gctcttgcta	ttcacatcga	actcctttga	tgtgatcagt	480
gatgatgctt	ttattggctt	tccacatcta	gagtatttat	tcatagaaaa	caacaacatc	540
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gttgctgaca	gttcaaaagc	tggttttact	accattttaca	aatggaaacgg	aaacggattc	1260
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<210> 123
 <211> 1770
 <212> DNA
 <213> Homo sapiens

<400> 123

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ctctgatctg	cagagctcca	ggacacctgg	ggcttggaag	gcagaggctg	aggacaccag	180
caaggacccc	gttggacgta	actggtgccc	ctaccaatg	tccaagctgg	tcaccttact	240
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ccagactgcc	agaaagtcaa	agtcatgtac	cgcattggccc	acaagccagt	gtaccagggtc	360
aagcagaagg	tgctgacctc	tttggcctgg	aggtgctgcc	ctggctacac	gggccccaac	420
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gcacaaagcg	gagggcgagc	gggcgcgggc	ggccacgtcg	cggctccgga	gccaaagtga	1740
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<210> 124
 <211> 1034
 <212> DNA
 <213> Homo sapiens

<400> 124

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gtactacaac	ctgtgtgacc	gctctggggc	gtggggcacc	gtcctggagg	ccgtggctgg	240
ggcgggcatt	gtcaccacgt	ttgtgtctac	catcatcctg	gtggccagcc	tcccctttgt	300
gcaggacacc	aagaaacgga	gcctgctggg	gacccagcta	agaggccggg	gtcaccatac	360
agcgggtaca	atgggcagct	gctgaccagt	gtgtaccagc	ccactgagat	ggccttgatg	420
cacaaagtcc	cgtccgaagg	agcttacgac	atcatcctcc	cacgggccac	cgccaacagc	480
caggtgatgg	gcagtgcctc	ctcgaccctg	cgggctgaag	acatgtactc	ggcccagagc	540
caccaggcgg	ccacaccgcc	gaaagacggc	aagaactctc	aggtctttag	aaacccctac	600
gtgtgggact	gagtcagcgg	tggcgaggag	aggcggtcgg	atttggggag	ggccttgagg	660

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70

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acctggcccc gggcaaggga ctctccaggc tctcctccc cctggcaggc ccagcaacat      720
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atgtttctct ggagattcct gcaacctcaa gagacttccc aggcgctcag gcctggatct      960
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aaaaaaaaaa aaaa                                     1034

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<210> 125

<211> 353

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (353)

<223> Xaa equals stop translation

<400> 125

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Met Leu Cys Arg Leu Cys Trp Leu Val Ser Tyr Ser Leu Ala Val Leu
  1              5              10              15

Leu Leu Gly Cys Leu Leu Phe Leu Arg Lys Ala Ala Lys Pro Ala Glu
      20              25              30

Thr Pro Arg Pro Thr Ser Leu Ser Gly Ala Pro Pro Thr Pro Arg His
      35              40              45

Ser Arg Cys Pro Pro Asn His Thr Val Ser Ser Ala Ser Leu Ser Leu
      50              55              60

Pro Ser Arg His Arg Leu Phe Leu Thr Tyr Arg His Cys Arg Asn Phe
      65              70              75              80

Ser Ile Leu Leu Glu Pro Ser Gly Cys Ser Lys Asp Thr Phe Leu Leu
      85              90              95

Leu Ala Ile Lys Ser Gln Pro Gly His Val Glu Arg Arg Ala Ala Ile
      100             105             110

Arg Ser Thr Trp Gly Arg Trp Gly Asp Gly Leu Gly Pro Ala Leu Lys
      115             120             125

Leu Val Phe Leu Leu Gly Val Ala Gly Ser Ala Pro Pro Ala Gln Leu
      130             135             140

Leu Ala Tyr Glu Ser Arg Glu Phe Asp Asp Ile Leu Gln Trp Asp Phe
      145             150             155             160

Thr Glu Asp Phe Phe Asn Leu Thr Leu Lys Glu Leu His Leu Gln Arg
      165             170             175

Trp Val Val Ala Ala Cys Pro Gln Ala His Phe Met Leu Lys Gly Asp
      180             185             190

Asp Asp Val Phe Val His Val Pro Asn Val Leu Glu Phe Leu Asp Gly

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195	200	205
Trp Asp Pro Ala Gln Asp Leu Leu Val Gly Asp Val Ile Arg Gln Ala		
210	215	220
Leu Pro Asn Arg Asn Thr Lys Val Lys Tyr Phe Ile Pro Pro Ser Met		
225	230	235 240
Tyr Arg Ala Thr His Tyr Pro Pro Tyr Ala Gly Gly Gly Gly Tyr Val		
	245	250 255
Met Ser Arg Ala Thr Val Arg Arg Leu Gln Ala Ile Met Glu Asp Ala		
	260	265 270
Glu Leu Phe Pro Ile Asp Asp Val Phe Val Gly Met Cys Leu Arg Arg		
	275	280 285
Leu Gly Leu Ser Pro Met His His Ala Gly Phe Lys Thr Phe Gly Ile		
	290	295 300
Arg Arg Pro Leu Asp Pro Leu Asp Pro Cys Leu Tyr Arg Gly Leu Leu		
305	310	315 320
Leu Val His Arg Leu Ser Pro Leu Glu Met Trp Thr Met Trp Ala Leu		
	325	330 335
Val Thr Asp Glu Gly Leu Lys Cys Ala Ala Gly Pro Ile Pro Gln Arg		
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Xaa

<210> 126
 <211> 158
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (108)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (156)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (158)
 <223> Xaa equals stop translation

<400> 126
 Met Ser Trp Val Gly Leu Gly Arg Arg Gly His Leu Leu Leu Ile
 1 5 10 15

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Asn Pro Arg Ala Leu Ala Gly Ile Arg Leu Pro Ser Pro Thr Gly Ala
 20 25 30
 Pro Ala Pro Gly Pro Cys Pro Pro Leu Cys Thr Pro His Cys Ser Arg
 35 40 45
 Glu His Pro Ala Gly Gly Thr Gly His Pro Ala Gly Val Trp Trp Arg
 50 55 60
 Arg Gly Cys Tyr Gly Gly Ser Cys Pro Met Gly Pro Val Arg Gly Ile
 65 70 75 80
 Leu Gly Gly Leu Pro Cys Arg Glu Glu Ala Leu Arg Arg His His Ser
 85 90 95
 Lys Pro Cys Trp Arg Pro Gly Gly Gln Ala Arg Xaa Leu Gly Ser Trp
 100 105 110
 Pro Leu Thr Ala Gly Arg Glu Pro Pro Arg Thr Ala Ser Thr Ala Pro
 115 120 125
 His Thr Ser Glu Pro Thr Ser Ser Phe Pro Arg Phe Pro Arg Ser Gln
 130 135 140
 Ala Trp Glu Asp Leu Pro Asp Ala Ala His His Xaa Ser Xaa
 145 150 155

<210> 127

<211> 554

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (199)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (201)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (202)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (228)

<223> Xaa equals any of the naturally occurring L-amino acids

SUBSTITUTE SHEET (RULE 26)

<220>
 <221> SITE
 <222> (420)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (434)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (440)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (452)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
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 <222> (554)
 <223> Xaa equals stop translation

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 Ile Gln Asp Ala Ala Ser Lys Asn Glu Asp Gln Glu Met Cys His Glu
 20 25 30
 Phe Gln Ala Phe Met Lys Xaa Gly Lys Leu Phe Cys Pro Gln Asp Lys
 35 40 45
 Lys Phe Phe Gln Ser Leu Asp Gly Ile Met Phe Ile Asn Lys Cys Ala
 50 55 60
 Thr Cys Lys Met Ile Leu Glu Lys Glu Ala Lys Ser Gln Lys Arg Ala
 65 70 75 80
 Arg His Leu Ala Arg Ala Pro Lys Ala Thr Ala Pro Thr Glu Leu Asn
 85 90 95
 Cys Asp Asp Phe Lys Lys Gly Glu Arg Asp Gly Asp Phe Ile Cys Pro
 100 105 110
 Asp Tyr Tyr Glu Ala Val Cys Gly Thr Asp Gly Lys Thr Tyr Asp Asn
 115 120 125
 Arg Cys Ala Leu Cys Ala Glu Asn Ala Lys Thr Gly Ser Gln Ile Gly
 130 135 140
 Val Lys Ser Glu Gly Glu Cys Lys Ser Ser Asn Pro Glu Gln Asp Val
 145 150 155 160

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Cys Ser Ala Phe Arg Pro Phe Val Arg Asp Gly Arg Leu Gly Cys Thr
 165 170 175
 Arg Glu Asn Asp Pro Val Leu Gly Pro Asp Gly Lys Thr His Gly Asn
 180 185 190
 Lys Cys Ala Met Cys Ala Xaa Leu Xaa Xaa Lys Glu Ala Glu Asn Ala
 195 200 205
 Lys Arg Glu Gly Glu Thr Arg Ile Arg Arg Asn Ala Glu Lys Asp Phe
 210 215 220
 Cys Lys Glu Xaa Glu Lys Gln Val Arg Asn Gly Arg Leu Phe Cys Thr
 225 230 235 240
 Arg Glu Ser Asp Pro Val Arg Gly Pro Asp Gly Arg Met His Gly Asn
 245 250 255
 Lys Cys Ala Leu Cys Ala Glu Ile Phe Lys Gln Arg Phe Ser Glu Glu
 260 265 270
 Asn Ser Lys Thr Asp Gln Asn Leu Gly Lys Ala Glu Glu Lys Thr Lys
 275 280 285
 Val Lys Arg Glu Ile Val Lys Leu Cys Ser Gln Tyr Gln Asn Gln Ala
 290 295 300
 Lys Asn Gly Ile Leu Phe Cys Thr Arg Glu Asn Asp Pro Ile Arg Gly
 305 310 315 320
 Pro Asp Gly Lys Met His Gly Asn Leu Cys Ser Met Cys Gln Ala Tyr
 325 330 335
 Phe Gln Ala Glu Asn Glu Glu Lys Lys Lys Ala Glu Ala Arg Ala Arg
 340 345 350
 Asn Lys Arg Glu Ser Gly Lys Ala Thr Ser Tyr Ala Glu Leu Cys Ser
 355 360 365
 Glu Tyr Arg Lys Leu Val Arg Asn Gly Lys Leu Ala Cys Thr Arg Glu
 370 375 380
 Asn Asn Pro Ile Gln Gly Pro Asp Gly Lys Val His Gly Asn Thr Cys
 385 390 395 400
 Ser Met Cys Glu Val Phe Phe Gln Ala Glu Glu Glu Glu Lys Lys Lys
 405 410 415
 Lys Glu Gly Xaa Ser Arg Asn Lys Arg Gln Ser Lys Ser Thr Ala Ser
 420 425 430
 Phe Xaa Glu Leu Cys Ser Glu Xaa Arg Lys Ser Arg Lys Asn Gly Arg
 435 440 445
 Leu Phe Cys Xaa Arg Glu Asn Asp Pro Ile Gln Gly Pro Asp Gly Lys
 450 455 460

SUBSTITUTE SHEET (RULE 26)

75

Met His Gly Asn Thr Cys Ser Met Cys Glu Ala Phe Phe Gln Gln Glu
 465 470 475 480

Glu Arg Ala Arg Ala Lys Ala Lys Arg Glu Ala Ala Lys Glu Ile Cys
 485 490 495

Ser Glu Phe Arg Asp Gln Val Arg Asn Gly Thr Leu Ile Cys Thr Arg
 500 505 510

Glu His Asn Pro Val Arg Gly Pro Asp Gly Lys Met His Gly Asn Lys
 515 520 525

Cys Ala Met Cys Ala Ser Val Phe Lys Leu Glu Lys Lys Lys Lys Lys
 530 535 540

Lys Lys Lys Lys Lys Gly Arg Pro Leu Xaa
 545 550

<210> 128
 <211> 308
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (308)
 <223> Xaa equals stop translation

<400> 128
 Met Asn Thr Val Leu Ser Leu Leu Phe Ser Leu Pro Arg Ile Val
 1 5 10 15

Tyr Ala Met Ala Ala Asp Gly Leu Phe Phe Gln Val Phe Ala His Val
 20 25 30

His Pro Arg Thr Gln Val Pro Val Ala Gly Thr Leu Ala Phe Gly Leu
 35 40 45

Leu Thr Ala Phe Leu Ala Leu Leu Asp Leu Glu Ser Leu Val Gln
 50 55 60

Phe Leu Ser Leu Gly Thr Leu Leu Ala Tyr Thr Phe Val Ala Thr Ser
 65 70 75 80

Ile Ile Val Leu Arg Phe Gln Lys Ser Ser Pro Pro Ser Ser Pro Gly
 85 90 95

Pro Ala Ser Pro Gly Pro Leu Thr Lys Gln Gln Ser Ser Phe Ser Asp
 100 105 110

His Leu Gln Leu Val Gly Thr Val His Ala Ser Val Pro Glu Pro Gly
 115 120 125

Glu Leu Lys Pro Ala Leu Arg Pro Tyr Leu Gly Phe Leu Asp Gly Tyr
 130 135 140

SUBSTITUTE SHEET (RULE 26)

76

Ser Pro Gly Ala Val Val Thr Trp Ala Leu Gly Val Met Leu Ala Ser
 145 150 155 160
 Ala Ile Thr Ile Gly Cys Val Leu Val Phe Gly Asn Ser Thr Leu His
 165 170 175
 Leu Pro His Trp Gly Tyr Ile Leu Leu Leu Leu Thr Ser Val Met
 180 185 190
 Phe Leu Leu Ser Leu Leu Val Leu Gly Ala His Gln Gln Gln Tyr Arg
 195 200 205
 Glu Asp Leu Phe Gln Ile Pro Met Val Pro Leu Ile Pro Ala Leu Ser
 210 215 220
 Ile Val Leu Asn Ile Cys Leu Met Leu Lys Leu Ser Tyr Leu Thr Trp
 225 230 235 240
 Val Arg Phe Ser Ile Trp Leu Leu Met Gly Leu Ala Val Tyr Phe Gly
 245 250 255
 Tyr Gly Ile Arg His Ser Lys Glu Asn Gln Arg Glu Leu Pro Gly Leu
 260 265 270
 Asn Ser Thr His Tyr Val Val Phe Pro Arg Gly Ser Leu Glu Glu Thr
 275 280 285
 Val Gln Ala Met Gln Pro Pro Ser Gln Ala Pro Ala Gln Asp Pro Gly
 290 295 300
 His Met Glu Xaa
 305

<210> 129

<211> 167

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (167)

<223> Xaa equals stop translation

<400> 129

Met Ala Ala Ala Val Leu Ala Met Thr Leu Ala Pro Thr Val Ser Gly
 1 5 10 15
 Thr Thr Ser Lys Cys Ser Ser Arg Arg Trp Cys Pro Val Pro Ala Ser
 20 25 30
 Ser Ser Cys Val Ser His Leu Leu Gly Ser Gly Cys Ala Pro Cys Ala
 35 40 45
 Pro Trp Thr Ala His Pro Arg Gln Pro Ser Gln Cys Trp Ser Ala Arg
 50 55 60

SUBSTITUTE SHEET (RULE 26)

77

Ala Pro Arg Arg Leu Gly Ser Arg Pro Arg Arg Tyr Leu Leu Thr Gly
 65 70 75 80

Gln Ala Asn Gly Ser Leu Ala Met Trp Asp Leu Thr Thr Ala Met Asp
 85 90 95

Gly Leu Gly Gln Ala Pro Ala Gly Gly Leu Thr Glu Gln Glu Leu Met
 100 105 110

Glu Gln Leu Glu His Cys Glu Leu Ala Pro Pro Ala Pro Phe Ser Ser
 115 120 125

Leu Met Gly Leu Ser Pro Gln Pro Leu Thr Pro His Leu Pro His Gln
 130 135 140

Pro Pro Leu Ser Leu Gln Gln His Leu Leu Val Trp Pro Pro Trp Glu
 145 150 155 160

Pro Lys Pro Pro Ala Gly Xaa
 165

<210> 130

<211> 306

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (306)

<223> Xaa equals stop translation

<400> 130

Met Ala Ala Gly Leu Ala Arg Leu Leu Leu Leu Gly Leu Ser Ala
 1 5 10 15

Gly Gly Pro Ala Pro Ala Gly Ala Ala Lys Met Lys Val Val Glu Glu
 20 25 30

Pro Asn Ala Phe Gly Val Asn Asn Pro Phe Leu Pro Gln Ala Ser Arg
 35 40 45

Leu Gln Ala Lys Arg Asp Pro Ser Pro Val Ser Gly Pro Val His Leu
 50 55 60

Phe Arg Leu Ser Gly Lys Cys Phe Ser Leu Val Glu Ser Thr Tyr Lys
 65 70 75 80

Tyr Glu Phe Cys Pro Phe His Asn Val Thr Gln His Glu Gln Thr Phe
 85 90 95

Arg Trp Asn Ala Tyr Ser Gly Ile Leu Gly Ile Trp His Glu Trp Glu
 100 105 110

Ile Ala Asn Asn Thr Phe Thr Gly Met Trp Met Arg Asp Gly Asp Ala
 115 120 125

SUBSTITUTE SHEET (RULE 26)

78

Cys Arg Ser Arg Ser Arg Gln Ser Lys Val Glu Leu Ala Cys Gly Lys
 130 135 140
 Ser Asn Arg Leu Ala His Val Ser Glu Pro Ser Thr Cys Val Tyr Ala
 145 150 155 160
 Leu Thr Phe Glu Thr Pro Leu Val Cys His Pro His Ala Leu Leu Val
 165 170 175
 Tyr Pro Thr Leu Pro Glu Ala Leu Gln Arg Gln Trp Asp Gln Val Glu
 180 185 190
 Gln Asp Leu Ala Asp Glu Leu Ile Thr Pro Gln Gly His Glu Lys Leu
 195 200 205
 Leu Arg Thr Leu Phe Glu Asp Ala Gly Tyr Leu Lys Thr Pro Glu Glu
 210 215 220
 Asn Glu Pro Thr Gln Leu Glu Gly Gly Pro Asp Ser Leu Gly Phe Glu
 225 230 235 240
 Thr Leu Glu Asn Cys Arg Lys Ala His Lys Glu Leu Ser Lys Glu Ile
 245 250 255
 Lys Arg Leu Lys Gly Leu Leu Thr Gln His Gly Ile Pro Tyr Thr Arg
 260 265 270
 Pro Thr Glu Thr Ser Asn Leu Glu His Leu Gly His Glu Thr Pro Arg
 275 280 285
 Ala Lys Ser Pro Glu Gln Leu Arg Gly Asp Pro Gly Leu Arg Gly Ser
 290 295 300
 Leu Xaa
 305

<210> 131
 <211> 220
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (56)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (58)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (204)
 <223> Xaa equals any of the naturally occurring L-amino acids

SUBSTITUTE SHEET (RULE 26)

<220>

<221> SITE

<222> (209)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (220)

<223> Xaa equals stop translation

<400> 131

Met	Pro	Cys	Leu	Glu	Ala	Val	Ala	Leu	Ile	Leu	Leu	Ile	Leu	Leu	Val
1				5					10					15	

Pro	Asp	Pro	Pro	Arg	Gly	Ala	Ala	Glu	Thr	Gln	Gly	Glu	Gly	Ala	Val
			20					25					30		

Gly	Gly	Phe	Arg	Ser	Ser	Trp	Cys	Glu	Asp	Val	Arg	Tyr	Leu	Gly	Lys
		35					40					45			

Asn	Trp	Ser	Phe	Val	Trp	Ser	Xaa	Leu	Xaa	Val	Thr	Ala	Met	Ala	Phe
	50					55					60				

Val	Thr	Gly	Ala	Leu	Gly	Phe	Trp	Ala	Pro	Lys	Phe	Leu	Leu	Glu	Ala
65					70					75					80

Arg	Val	Val	His	Gly	Leu	Gln	Pro	Pro	Cys	Phe	Gln	Glu	Pro	Cys	Ser
				85					90					95	

Asn	Pro	Asp	Ser	Leu	Ile	Phe	Gly	Ala	Leu	Thr	Ile	Met	Thr	Gly	Val
			100					105					110		

Ile	Gly	Val	Ile	Leu	Gly	Ala	Glu	Ala	Ala	Arg	Arg	Tyr	Lys	Lys	Val
	115						120					125			

Ile	Pro	Gly	Ala	Glu	Pro	Leu	Ile	Cys	Ala	Ser	Ser	Leu	Leu	Ala	Thr
	130					135					140				

Ala	Pro	Cys	Leu	Tyr	Leu	Ala	Leu	Val	Leu	Ala	Pro	Thr	Thr	Leu	Leu
145					150					155					160

Ala	Ser	Tyr	Val	Phe	Leu	Gly	Leu	Gly	Glu	Leu	Leu	Leu	Ser	Cys	Asn
			165					170						175	

Trp	Ala	Val	Val	Ala	Asp	Ile	Leu	Leu	Ser	Val	Val	Val	Pro	Arg	Cys
		180					185						190		

Arg	Gly	Thr	Ala	Glu	Ala	Leu	Gln	Ile	Thr	Val	Xaa	His	Ile	Leu	Gly
		195					200					205			

Xaa	Leu	Ala	Ala	Leu	Ser	His	Arg	Thr	Tyr	Leu	Xaa
210						215					220

<210> 132

<211> 99

<212> PRT

SUBSTITUTE SHEET (RULE 26)

80

<213> Homo sapiens

<220>

<221> SITE

<222> (99)

<223> Xaa equals stop translation

<400> 132

Met Met Asn Gln His Leu Leu Glu Ser Phe Gly Ser Pro Ser Ser Leu
 1 5 10 15

Phe Ile Val Phe Ile Leu Leu Ile Trp Met Leu Gln Arg Cys Lys Asp
 20 25 30

Phe Phe Leu Cys Cys Tyr Arg Val Val Leu Thr Pro Ser Phe Trp Gln
 35 40 45

Lys His Gln His Pro Asp Pro Lys Ile Lys His His Leu Lys Leu Tyr
 50 55 60

Ser Leu Lys Tyr Ser Ser Ser Gly Gln Asn Asn Phe Arg Lys Asp Lys
 65 70 75 80

His Trp Leu Ser Gly His Thr Glu Glu Ala Asn Leu Ile Lys Glu Glu
 85 90 95

Trp Lys Xaa

<210> 133

<211> 61

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (61)

<223> Xaa equals stop translation

<400> 133

Met Thr Ser Ser Leu Phe Ile Phe Leu Phe Leu Trp Phe Cys Pro Pro
 1 5 10 15

Pro Arg Ile Ser Phe Val Leu Cys Trp Pro Gln Pro His Ser Gln Val
 20 25 30

His Ile Gln His Glu Lys Ala Asp His Leu Phe Gln Ser Leu Lys Gln
 35 40 45

Lys Ala Pro Gly Leu Leu Gln Trp Ala Arg Ile Val Xaa
 50 55 60

<210> 134

<211> 248

<212> PRT

SUBSTITUTE SHEET (RULE 26)

<213> Homo sapiens

<220>

<221> SITE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (141)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (248)

<223> Xaa equals stop translation

<400> 134

Met	Ala	Val	Pro	Ala	Leu	Thr	Pro	Ala	Ala	Val	Arg	Ala	Xaa	Gly	Leu
1				5					10					15	
Leu	Gly	Val	Ser	Trp	Thr	Trp	Ala	Leu	Phe	Thr	Pro	Leu	Val	Ala	Leu
		20						25					30		
Gly	Arg	Glu	Gly	Gly	Ser	Gln	Asp	Ser	Ala	Thr	Thr	Pro	Ser	Arg	Pro
	35						40					45			
Pro	Gly	Arg	Pro	Arg	Ile	Val	Asp	Ile	Ala	Thr	Ile	Val	His	Cys	Tyr
	50					55					60				
Ala	Glu	Glu	Arg	Gln	Ser	Ala	Glu	Asp	Tyr	Glu	Lys	Glu	Glu	Ser	His
65					70					75					80
Arg	Gln	Arg	Arg	Leu	Lys	Glu	Arg	Glu	Arg	Ile	Gly	Glu	Leu	Gly	Ala
				85					90					95	
Pro	Glu	Val	Trp	Gly	Pro	Ser	Pro	Lys	Phe	Pro	Gln	Leu	Asp	Ser	Asp
		100						105					110		
Glu	His	Thr	Pro	Val	Glu	Asp	Glu	Glu	Glu	Val	Thr	His	Gln	Lys	Ser
	115						120					125			
Ser	Ser	Ser	Asp	Ser	Asn	Ser	Glu	Glu	His	Arg	Lys	Xaa	Lys	Thr	Ser
	130					135					140				
Arg	Ser	Arg	Asn	Lys	Lys	Lys	Arg	Lys	Asn	Lys	Ser	Ser	Lys	Arg	Lys
145					150					155					160
His	Arg	Lys	Tyr	Ser	Asp	Ser	Asp	Ser	Asn	Ser	Glu	Ser	Asp	Thr	Asn
				165					170					175	
Ser	Asp	Ser	Asp	Asp	Asp	Lys	Lys	Arg	Val	Lys	Ala	Lys	Lys	Lys	Lys
		180						185					190		
Lys	Lys	Lys	Lys	His	Lys	Thr	Lys	Lys	Lys	Lys	Asn	Lys	Lys	Thr	Lys
	195						200					205			

SUBSTITUTE SHEET (RULE 26)

82

Lys Glu Ser Ser Asp Ser Ser Cys Lys Asp Ser Glu Glu Asp Leu Ser
 210 215 220

Glu Ala Thr Trp Asp Gly Ala Ala Lys Cys Gly Arg Tyr Tyr Gly Phe
 225 230 235 240

Asn Arg Ala Arg Ser Thr Tyr Xaa
 245

<210> 135

<211> 41

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (41)

<223> Xaa equals stop translation

<400> 135

Met Val Cys Phe Tyr Ala Leu Leu Leu Cys Phe Leu Ser Ser Val Glu
 1 5 10 15

Ile Gly Pro Leu Ser Trp Leu Leu Cys Leu Ser His Ile Lys Cys His
 20 25 30

Phe Thr Ala Leu Pro Phe Glu Ala Xaa
 35 40

<210> 136

<211> 75

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (75)

<223> Xaa equals stop translation

<400> 136

Met Leu His Leu Phe Cys Ser Gln Pro Leu Gly Leu Leu Phe Leu Leu
 1 5 10 15

Ile Phe Leu Gly Leu Asp Ser Leu Pro Arg Cys Leu Thr Ala Thr Arg
 20 25 30

Leu Gln Ser Pro Ile Ile Ile Phe Ser Thr Leu Ser Cys Ile Cys Ser
 35 40 45

Thr Ser Trp Leu Glu Leu Cys Ser Val Tyr Phe Leu Thr Leu Asn Tyr
 50 55 60

Leu His Val Val Pro Pro Cys Phe Leu Ile Xaa
 65 70 75

SUBSTITUTE SHEET (RULE 26)

<210> 137
 <211> 75
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (75)
 <223> Xaa equals stop translation

<400> 137
 Met Gly Val Leu Thr Arg Glu Leu Phe Gly Val Val Gly Met Leu Tyr
 1 5 10 15
 Ile Leu Ile Val Gly Met Val Thr Trp Leu Asp Ala Phe Val Lys Thr
 20 25 30
 His Leu Met Val Met Gln Asn Glu Tyr Ile Leu Phe Tyr Val Asn Tyr
 35 40 45
 Thr Ser Lys Leu Asn Phe Phe Lys Lys Phe Leu Leu Lys Ser Lys Asp
 50 55 60
 Ile Cys Gly Ala Ser Cys Lys Phe Tyr Cys Xaa
 65 70 75

<210> 138
 <211> 58
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (58)
 <223> Xaa equals stop translation

<400> 138
 Met Lys Val Leu Leu Ser Leu Ser Leu Val Gly Leu Phe Ile Gly Phe
 1 5 10 15
 Ser Asp Ala Val Leu Asn Glu Thr Cys Arg Phe Trp Ile Asn Thr Ser
 20 25 30
 Ser Lys Gly Asn Leu Gln Ile Leu Lys Asn Gln Ile Gln Ile Ile Asp
 35 40 45
 Arg Leu Arg Lys Met Pro Ala Ser Ala Xaa
 50 55

<210> 139
 <211> 173
 <212> PRT
 <213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

<220>
 <221> SITE
 <222> (76)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (124)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 139
 Met Leu Gly Ser Pro Cys Leu Leu Trp Leu Leu Ala Val Thr Phe Leu
 1 5 10 15
 Val Pro Arg Ala Gln Pro Leu Ala Pro Gln Asp Phe Glu Glu Glu Glu
 20 25 30
 Ala Asp Glu Thr Glu Thr Ala Trp Pro Pro Leu Pro Ala Val Pro Cys
 35 40 45
 Asp Tyr Asp His Cys Arg His Leu Gln Val Pro Cys Lys Glu Leu Gln
 50 55 60
 Arg Val Gly Pro Ala Ala Cys Leu Cys Pro Gly Xaa Ser Ser Pro Ala
 65 70 75 80
 Gln Pro Pro Asp Pro Pro Arg Met Gly Glu Val Arg Ile Ala Ala Glu
 85 90 95
 Glu Gly Arg Ala Val Val His Trp Cys Ala Pro Phe Ser Pro Val Leu
 100 105 110
 His Tyr Trp Leu Leu Leu Trp Asp Gly Ser Glu Xaa Arg Arg Arg Gly
 115 120 125
 Pro Pro Leu Asn Ala Thr Val Arg Arg Ala Glu Leu Lys Gly Leu Lys
 130 135 140
 Pro Gly Gly Ile Tyr Val Val Cys Val Val Ala Ala Asn Glu Ala Gly
 145 150 155 160
 Ala Ser Arg Val Pro Gln Ala Gly Gly Glu Gly Leu Glu
 165 170

<210> 140
 <211> 46
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (46)
 <223> Xaa equals stop translation

<400> 140
 Met Thr Ile His Ala Leu Leu Val Tyr Ala Cys Asn Ser Lys Cys Leu

SUBSTITUTE SHEET (RULE 26)

```

<400> 142
Met Phe Val Glu Arg Trp Leu Pro Cys Phe Leu Val Val Ala Val Val
  1             5             10             15
Val Trp Val Phe Ala Cys Gly Pro Val Glu Asp Lys Glu Asp Ser Phe
          20             25             30
Gly Trp Ser Ser Tyr Phe Leu Ala Ser Gly Leu Pro Pro Leu Leu Phe
          35             40             45
Glu Ala Ser Gln Thr Arg Thr Val Arg Ala Gly Arg Leu Gly Val Phe
          50             55             60
Val Cys Xaa

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65

<210> 143

<211> 53

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (53)

<223> Xaa equals stop translation

<400> 143

Met	Ile	Phe	Lys	Leu	Leu	Ile	Phe	Arg	Ile	Phe	Phe	His	Glu	Leu	Ala
1				5					10					15	

Leu	Ala	Leu	Cys	Ile	Ser	Asn	Leu	Val	Ser	Leu	Pro	Trp	Leu	Ser	Tyr
			20					25					30		

Phe	Trp	Cys	Pro	Glu	Met	Gln	Asn	Leu	Phe	Leu	Leu	Asp	Thr	His	Ile
		35					40					45			

Trp	Val	Leu	Met	Xaa
				50

<210> 144

<211> 66

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (66)

<223> Xaa equals stop translation

<400> 144

Met	Val	Leu	Ser	Val	Ala	Leu	Leu	His	Ala	Leu	Ser	His	Leu	Met	Pro
1				5					10					15	

Cys	Lys	Thr	Cys	Leu	Ala	Ser	Thr	Ser	Pro	Ser	Ala	Met	Ile	Val	Ser
			20					25					30		

Phe	Leu	Arg	Pro	Pro	Gln	Pro	Ala	Met	Trp	Asn	Cys	Glu	Ser	Ile	Lys
		35					40					45			

Pro	Phe	Leu	Phe	Ile	His	Tyr	Pro	Val	Ser	Gly	Ser	Ile	Phe	Ile	Ala
		50				55					60				

Val	Xaa
	65

<210> 145

<211> 57

<212> PRT

SUBSTITUTE SHEET (RULE 26)

<213> Homo sapiens

<220>

<221> SITE

<222> (57)

<223> Xaa equals stop translation

<400> 145

Met Val Ala Ile Leu Leu Arg Glu Leu Pro Leu Ala Phe Leu Leu Val
1 5 10 15

Gly Ser Ser Gly Asp Lys Phe Cys Phe Thr Ser Ser Glu Asn Val Leu
20 25 30

Leu Ser Phe Ser Phe Leu Lys Asp Ile Phe Ala Gly Tyr Lys Asn Ser
35 40 45

Gly Leu Met Val Leu Phe Ile Val Xaa
50 55

<210> 146

<211> 67

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (67)

<223> Xaa equals stop translation

<400> 146

Met Ser Asn Phe Ile Ser Ile Thr Cys Leu Val Phe Thr Ile Leu Gly
1 5 10 15

His Leu Val Ser Leu Gln Val Ala His Ser Ser Val Phe Glu Phe Lys
20 25 30

Thr Leu Tyr Val Leu Lys Thr Asn Arg Tyr Ser Gln Ser Leu Phe Arg
35 40 45

His Phe Cys His Leu Ser Phe Ile Arg Thr Arg Lys Ile Phe Leu Lys
50 55 60

Asn Asn Xaa
65

<210> 147

<211> 49

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (49)

<223> Xaa equals stop translation

SUBSTITUTE SHEET (RULE 26)

<400> 147

Met Met Lys Tyr Phe Phe Asp Val Val Val Phe Leu Thr Phe Phe Leu
 1 5 10 15

Val Phe Ser Leu Ser Ile Phe Leu Ser Asp Glu Glu Phe Pro Val Ser
 20 25 30

Arg Thr Gln Asn Ile Gly Leu Cys His Phe Asn Pro Ser Phe Ser Glu
 35 40 45

Xaa

<210> 148

<211> 89

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (89)

<223> Xaa equals stop translation

<400> 148

Met Leu Leu Leu Cys Leu Tyr Cys Thr Phe Phe Leu Met Pro Phe Ile
 1 5 10 15

Ile Lys Tyr Thr Cys Phe His Leu Val Phe Gly Gln Ile Pro Val Thr
 20 25 30

Val His Val Asn Ile Trp Gln His Lys Asn Val Thr Phe Phe Ile Leu
 35 40 45

His Cys Gly Ile Pro Ala Leu Thr Arg Asp Ser Ala Ala Leu Thr Tyr
 50 55 60

Ser Asn Asp Gly Thr Val Ile Glu Thr Leu Leu Phe Leu Ile Leu Tyr
 65 70 75 80

Leu Asp Leu Asn Ile Ile Cys Cys Xaa
 85

<210> 149

<211> 77

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (77)

<223> Xaa equals stop translation

<400> 149

Met Thr Leu Tyr Ser Lys Leu Leu Trp Leu Phe Lys Gly Glu Leu Leu

SUBSTITUTE SHEET (RULE 26)

89
 1 5 10 15
 Phe Pro Leu Val Leu Ala Tyr Val Leu Leu Leu Tyr Ile Val Thr Lys
 20 25 30
 Phe Asn Tyr Leu Ile Leu Lys Leu Phe Pro Asn Lys Ile Gln Ile Lys
 35 40 45
 Arg Gly Ser Ile Ala Ser Asn Arg Ser Leu Glu Ser Ser Ala Ser Leu
 50 55 60
 Pro Ala Arg Lys Glu Glu Lys Leu Leu Lys Lys Phe Xaa
 65 70 75

<210> 150
 <211> 42
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (42)
 <223> Xaa equals stop translation

<400> 150
 Met Asn Leu Ser Phe Leu Ser Phe Phe Leu Phe Phe Tyr Leu Leu Trp
 1 5 10 15
 Ser Pro Ala Glu Ser Val Tyr Lys Lys Gly Met Val Lys Lys Asn Leu
 20 25 30
 Ser His Ser Ile Val Glu Lys Ile Lys Xaa
 35 40

<210> 151
 <211> 46
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (46)
 <223> Xaa equals stop translation

<400> 151
 Met Asn Ala Leu Pro Asn Leu Ala Trp Leu Pro Phe Val Pro Ala Leu
 1 5 10 15
 Ala Ala Ala Ser Pro Ala Gly Leu Ala Ala Pro Glu Ser Arg Asp Val
 20 25 30
 Pro Phe Pro Val Ser Pro Ala Thr Gln Leu Asn Ile Gly Xaa
 35 40 45

SUBSTITUTE SHEET (RULE 26)

<210> 152
<211> 42
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals stop translation

<400> 152
Met Leu His Leu Leu Cys Leu Gly Leu His Leu Val Pro Pro Gly Leu
1 5 10 15
Leu Ser Val Asn Ser Leu Gln Ser Thr Gln Cys Ser Leu Phe Ser Ala
20 25 30
Ala Lys Phe Phe Ser Ile Val Gln Val Xaa
35 40

<210> 153
<211> 44
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (44)
<223> Xaa equals stop translation

<400> 153
Met Pro Tyr Met Phe Arg Pro Ala Phe Leu Asn Cys Gly Thr Phe Ala
1 5 10 15
Ile Phe Gly Gln Leu Asn Ser Val Val Gly Ala Val Leu Cys Ile Ala
20 25 30
Gly Cys Leu Ala Ala Ser Leu Ala Ser Thr Tyr Xaa
35 40

<210> 154
<211> 123
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (123)
<223> Xaa equals stop translation

<400> 154
Met Pro Pro Leu Ala Pro Gln Leu Cys Arg Ala Val Phe Leu Val Pro
1 5 10 15
Ile Leu Leu Leu Leu Gln Val Lys Pro Leu Asn Gly Ser Pro Gly Pro

SUBSTITUTE SHEET (RULE 26)


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<210> 155
<211> 42
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (42)
<223> Xaa equals stop translation
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<400> 155
Met Lys Gln Phe Gly Phe Gly His Pro Ile Lys Leu Leu Lys Thr Lys
  1             5             10             15
Leu Cys Arg Ile Val Phe Tyr Leu Val Phe Phe Val Trp Pro Gln Ser
      20             25             30
Ser Val Ile Arg Glu Ala Thr Gln Thr Xaa
      35             40

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<210> 156
<211> 56
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (56)
<223> Xaa equals stop translation
```

```

<400> 156
Met Val Leu Ala Ala Pro Leu Val Ala Phe Pro Cys Ile Leu Leu Phe
  1             5             10             15
Ala Phe Ser Pro Ser Ala Val Arg Asp His Val Gly Asp Ser Arg Ser

```

92

20

25

30

Asp Val Pro Ile Phe Ala Cys Leu Ala Leu Ala Ser Leu Ala Leu Gly
 35 40 45

Ser Val Leu Leu Val Ala Phe Xaa
 50 55

<210> 157
 <211> 45
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (45)
 <223> Xaa equals stop translation

<400> 157
 Met Met Lys Met Val Leu Gly Leu Phe Phe Leu Met Asn Leu Leu Ser
 1 5 10 15

Gly Lys Lys Ser Val Arg His His Ser Lys Asn Tyr Val Lys Lys Met
 20 25 30

Gln Thr Phe Gln Phe Pro Arg Val Tyr Lys Leu Met Xaa
 35 40 45

<210> 158
 <211> 86
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (86)
 <223> Xaa equals stop translation

<400> 158
 Met Lys Lys Val Leu Leu Leu Ile Thr Ala Ile Leu Ala Val Ala Val
 1 5 10 15

Gly Phe Pro Val Ser Gln Asp Gln Glu Arg Glu Lys Arg Ser Ile Ser
 20 25 30

Asp Ser Asp Glu Leu Ala Ser Gly Phe Phe Val Phe Pro Tyr Pro Tyr
 35 40 45

Pro Phe Arg Pro Leu Pro Pro Ile Pro Phe Pro Arg Phe Pro Trp Phe
 50 55 60

Arg Arg Asn Phe Pro Ile Pro Ile Pro Glu Ser Ala Pro Thr Thr Pro
 65 70 75 80

Leu Pro Ser Glu Lys Xaa

SUBSTITUTE SHEET (RULE 26)

<210> 159
 <211> 45
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (45)
 <223> Xaa equals stop translation

<400> 159
 Met Ile Cys Leu Cys Ser Ile Lys Met Leu Leu Leu Phe Cys Gln Leu
 1 5 10 15
 Thr Phe Ala Leu Ile Thr Cys Ile Asn Leu Gln Ser Leu Tyr Leu Phe
 20 25 30
 Ser Tyr Gln Gln Ile Ile Gly Ile His Ser His Val Xaa
 35 40 45

<210> 160
 <211> 69
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (69)
 <223> Xaa equals stop translation

<400> 160
 Met Trp Leu Arg Gly Ile His Pro Phe Leu Trp Leu Ser Gly Ile His
 1 5 10 15
 Ser Phe Pro Trp Leu Ser Gly Gly Pro Ser Leu Gly Thr Ser Ser Glu
 20 25 30
 Gln Pro Thr Ser Leu Glu Asp Gly Lys Leu Ile Cys Leu Phe Thr Asp
 35 40 45
 Phe Ser Gly Ser Ser Phe Gly Leu Phe Met Arg Glu Ala Ala Lys Asn
 50 55 60
 Ile Ser Gln Met Xaa
 65

<210> 161
 <211> 53
 <212> PRT
 <213> Homo sapiens

<220>

SUBSTITUTE SHEET (RULE 26)

<221> SITE
 <222> (53)
 <223> Xaa equals stop translation

<400> 161
 Met Leu Tyr Asp Ser Asn Leu Cys Ser Val Trp His Leu Tyr Leu Ile
 1 5 10 15
 Leu His Leu Cys Lys Thr Phe Val Tyr Cys Gly Cys Val His Ser Ser
 20 25 30
 Tyr Leu Ile Ser Gly Thr Val Asn Thr Gln Tyr Phe Ile Val Gln Thr
 35 40 45
 Val Leu Leu Phe Xaa
 50

<210> 162
 <211> 57
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (57)
 <223> Xaa equals stop translation

<400> 162
 Met Arg Val Lys Ile Ser Tyr Leu Met Ile Ala Leu Thr Val Val Gly
 1 5 10 15
 Cys Ile Phe Met Val Ile Glu Gly Lys Lys Ala Ala Gln Arg His Glu
 20 25 30
 Thr Leu Thr Ser Leu Asn Leu Glu Lys Lys Ala Arg Leu Lys Glu Glu
 35 40 45
 Ala Ala Met Lys Ala Lys Thr Glu Xaa
 50 55

<210> 163
 <211> 56
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (56)
 <223> Xaa equals stop translation

<400> 163
 Met Arg Glu Lys Thr Gly Ala Leu Pro Arg Cys Leu Gly Leu Leu Gly
 1 5 10 15
 Val Gly Leu Leu Trp Arg Trp Cys Gly Arg Arg Ala Arg Ala Gly Val

SUBSTITUTE SHEET (RULE 26)

```

<400> 164
Met His Gly His Thr Ser Ser Leu Pro Pro Ser Leu Leu Ser Ser Leu
  1                      5                      10                      15

Pro Ser Gly Leu Leu Ala Leu Phe Val Phe Pro Phe Leu Ile Leu Leu
          20                      25                      30

Leu His Ala Glu Asp Leu Pro Tyr Tyr Tyr Phe Gly Asn Ile Glu Xaa
          35                      40                      45

```

```

<400> 165
Met Ser Ala Ser Ser Leu His Arg Leu Pro Val Leu Met Ala Leu Phe
  1                      5                      10                      15

Pro Phe Gln Ala Ala Ala Ala Gly Ser Leu Gly Leu Gln Pro Pro Pro
          20                      25                      30

Thr Pro Met Lys Gly Lys Pro Ser Ile Met Leu Pro Pro Gln Tyr Lys
          35                      40                      45

Arg Arg Glu Gly Leu Lys Lys Lys Lys Lys Lys Ile Gln Lys Val Ala
          50                      55                      60

Leu Val Ser Phe Gly Arg Ala Asp Ser Ile Val Gly Asp Gly Leu Pro

```

```
<210> 166
<211> 105
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (105)
<223> Xaa equals stop translation
```

```

<400> 166
Met Leu Trp Leu Leu Phe Phe Leu Val Thr Ala Ile His Ala Glu Leu
  1             5             10             15

Cys Gln Pro Gly Ala Glu Asn Ala Phe Lys Val Arg Leu Ser Ile Arg
      20             25             30

Thr Ala Leu Gly Asp Lys Ala Tyr Ala Trp Asp Thr Asn Glu Glu Tyr
      35             40             45

Leu Phe Lys Ala Met Val Ala Phe Ser Met Arg Lys Val Pro Asn Arg
      50             55             60

Glu Ala Thr Glu Ile Ser His Val Leu Leu Cys Asn Val Thr Gln Arg
      65             70             75             80

Tyr His Ser Gly Leu Trp Leu Gln Thr Leu Gln Lys Ile Thr Pro Phe
      85             90             95

Leu Leu Leu Arg Cys Asn Gln Pro Xaa
      100             105

```

```
<210> 167
<211> 77
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (77)
<223> Xaa equals stop translation
```

<400> 167

Met Thr Lys Ala Arg Leu Phe Arg Leu Trp Leu Val Leu Gly Ser Val
 1 5 10 15
 Phe Met Ile Leu Leu Ile Ile Val Tyr Trp Asp Ser Ala Ala Pro Arg
 20 25 30
 Thr Ser Thr Cys Thr Arg Pro Ser Leu Gly Arg Thr Arg Gly Arg Arg
 35 40 45
 Cys Pro Arg Pro Gly Arg Thr Gly Gln Gly Ala His Gly Arg Leu Arg
 50 55 60
 Cys Arg Arg Val Ser Gly Gln Phe Leu Met Leu Ala Xaa
 65 70 75

<210> 168

<211> 355

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (355)

<223> Xaa equals stop translation

<400> 168

Met Trp Arg Leu Trp Pro Gly Ser Pro Leu Val Pro Leu Ser Trp Leu
 1 5 10 15
 Trp Pro Ala Arg Ala Ala Phe Leu Ser Gly Pro Trp Thr Leu Pro Pro
 20 25 30
 Cys Leu Pro Asp Pro Leu Leu Ala Val Pro Lys Cys Cys Leu Thr Leu
 35 40 45
 Gly Ile His Leu Leu Pro Ala Trp Pro Gly Pro Pro Val Gly Gly Gly
 50 55 60
 Cys Ser Gln Leu His Arg Gly Cys Cys Tyr Pro Gly Met Gly Cys Leu
 65 70 75 80
 Asn Arg Asp Leu Cys Pro Pro Ser Leu Val Ser Arg Arg Trp Gly Asp
 85 90 95
 Gln Leu Leu Trp Ser Pro Asp Gly Ser Lys Ile Leu Ala Thr Thr Pro
 100 105 110
 Ser Ala Val Phe Arg Val Trp Glu Ala Gln Met Trp Thr Cys Glu Arg
 115 120 125
 Trp Pro Thr Leu Ser Gly Arg Cys Gln Thr Gly Cys Trp Ser Pro Asp
 130 135 140
 Gly Ser Arg Leu Leu Phe Thr Val Leu Gly Glu Pro Leu Ile Tyr Ser

SUBSTITUTE SHEET (RULE 26)

98

145		150		155		160
Leu Ser Phe Pro Glu Arg Cys Gly Glu Gly Lys Gly Cys Val Gly Gly						
	165			170		175
Ala Lys Ser Ala Thr Ile Val Ala Asp Leu Ser Glu Thr Thr Ile Gln						
	180		185			190
Thr Pro Asp Gly Glu Glu Arg Leu Gly Gly Glu Ala His Ser Met Val						
	195		200		205	
Trp Asp Pro Ser Gly Glu Arg Leu Ala Val Leu Met Lys Gly Lys Pro						
	210		215		220	
Arg Val Gln Asp Gly Lys Pro Val Ile Leu Leu Phe Arg Thr Arg Asn						
	225		230		235	240
Ser Pro Val Phe Glu Leu Leu Pro Cys Gly Ile Ile Gln Gly Glu Pro						
	245		250			255
Gly Ala Gln Pro Gln Leu Ile Thr Phe His Leu Pro Ser Thr Lys Gly						
	260		265			270
Pro Cys Ser Val Trp Ala Gly Pro Gln Ala Glu Leu Pro Thr Ser Arg						
	275		280		285	
Cys Thr Leu Ser Met Pro Ser Phe His Val Leu Ala Gln Cys Leu Gly						
	290		295		300	
Gly Pro Arg Asn Pro Leu Leu Gly Val Glu Ala Leu Phe Met Thr Cys						
	305		310		315	320
Pro Ser Leu Leu Arg His Pro Gln Pro Leu Pro Leu Gly Thr Leu Ser						
	325		330			335
Gln Gly His His Leu Phe Cys Pro Thr Pro His Ile Pro Thr Ser Lys						
	340		345			350
Asn Lys Xaa						
	355					

<210> 169

<211> 90

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (90)

<223> Xaa equals stop translation

<400> 169

Met Cys Val Cys Tyr Phe Leu Val Phe Leu Gln Ile Trp Ala Arg Leu
1 5 10 15

Ser His Leu Leu Val Trp Ile Tyr Pro Gly Ala Gly Leu Gln Pro Gly

SUBSTITUTE SHEET (RULE 26)

99

20	25	30
Lys Gly His Pro Ala Gln Ser Leu Phe Pro His Glu His Cys His Leu		
35	40	45
Met Pro Gln His Ser Leu Thr Leu Lys Ile Leu Glu Glu Lys Leu Gly		
50	55	60
Gly Lys Gly Glu Ser Gly Ser Asn Phe Thr Phe Leu His Cys Lys Ile		
65	70	75 80
Leu Ala Thr Ser Ala Leu Asn Phe Ser Xaa		
85	90	

<210> 170
 <211> 59
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (59)
 <223> Xaa equals stop translation

<400> 170
 Met Val Leu Pro Phe Val Leu Leu Phe Arg Pro Asn Phe Ile Ser Val
 1 5 10 15
 Leu His Pro Leu Phe Tyr Ser His Cys Leu Phe Leu Tyr Leu Ile Ser
 20 25 30
 Pro Val His Ser Ser Ser Ile Ile Tyr Tyr Lys Pro Asp His Cys His
 35 40 45
 Tyr Thr Pro Phe Ile Pro Gly Leu Leu Gln Xaa
 50 55

<210> 171
 <211> 70
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (70)
 <223> Xaa equals stop translation

<400> 171
 Met Leu Leu Ser Lys Glu His Thr Ser Leu Gly Trp Leu Val Ile Phe
 1 5 10 15
 Leu Thr Leu Ala Ser Gln Leu Ile Ser Tyr Gly Ser Arg Thr Gly Asn
 20 25 30
 Ser Arg Cys Pro Pro Cys Leu Tyr Arg Thr Leu His Thr Val Ser Thr

SUBSTITUTE SHEET (RULE 26)

100

35 40 45

Ser His Val Leu Ser Ser Leu Phe Val Ser Thr Phe Ser Gly Asp Glu
 50 55 60

Leu Val Trp Thr Thr Xaa
 65 70

<210> 172
 <211> 79
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (79)
 <223> Xaa equals stop translation

<400> 172

Met Val Leu Asp Phe Lys Arg Ala Gly Ser Phe Phe Leu Ser Phe Leu
 1 5 10 15

Trp Thr Arg Glu Ala Phe Ala Phe Ile Phe Thr Leu Pro Leu Leu Leu
 20 25 30

Ser Leu Cys Arg Gly Lys Met Lys Asn Ser Pro Arg Ser Asp Leu Ser
 35 40 45

Arg Leu Lys Lys Asn Val Phe Asn Ala Phe Leu Pro Cys Leu Val Pro
 50 55 60

Arg Phe Ile Ser Asn Arg Gly Cys Pro Val Tyr Arg Ser Cys Xaa
 65 70 75

<210> 173
 <211> 174
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (150)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (152)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (174)
 <223> Xaa equals stop translation

<400> 173

SUBSTITUTE SHEET (RULE 26)

101

Met	Gly	Val	Pro	Thr	Ala	Pro	Glu	Ala	Gly	Ser	Trp	Arg	Trp	Gly	Ser
1				5					10					15	
Leu	Leu	Phe	Ala	Leu	Phe	Leu	Ala	Ala	Ser	Leu	Asp	Ile	Thr	Ala	Ala
			20					25					30		
Ala	Leu	Ala	Thr	Gly	Ala	Cys	Ile	Val	Glu	Ser	Ser	Ala	Ser	Pro	Ser
			35				40					45			
Ser	Cys	Ser	Trp	Ser	Thr	Ser	Lys	Gly	Arg	Gln	Pro	Pro	Thr	Ala	Val
	50					55					60				
Pro	Arg	Ser	Trp	Cys	Gly	Trp	Thr	Ala	Thr	Phe	Lys	Gly	Leu	Lys	Thr
65					70					75					80
Pro	Ala	Leu	Lys	Pro	His	His	Leu	Pro	Arg	Gly	Tyr	Pro	Arg	Pro	Lys
				85					90					95	
Ser	Gly	Thr	Pro	Cys	Pro	Met	Trp	Pro	Ser	Gly	Ser	Leu	Leu	Ser	Leu
			100					105					110		
Gly	Gly	Ile	Cys	Phe	Arg	Ser	Pro	Ala	Pro	Pro	Cys	Leu	Leu	Gln	Ala
		115					120					125			
Pro	Glu	Thr	Ser	Ser	Ser	His	Pro	Trp	Thr	Leu	Ser	Leu	Thr	Leu	Gln
	130					135					140				
Thr	Leu	Arg	Ser	Ser	Xaa	Pro	Xaa	Gly	Gly	Gln	Trp	Ala	Val	Val	Ala
145					150					155					160
Gly	Ser	Gly	Ala	Gly	Ala	Phe	Glu	Pro	Gly	Leu	Ala	Leu	Xaa		
				165					170						

<210> 174

<211> 64

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (64)

<223> Xaa equals stop translation

<400> 174

Met	Phe	Val	Leu	Trp	Val	Phe	Lys	Ile	Thr	Tyr	Ile	Tyr	Ile	Leu	Phe
1				5					10					15	
Ala	Lys	Asn	Lys	Ser	Leu	Ala	Ser	Cys	Gln	Met	Ile	Ala	Lys	Val	Asp
			20					25					30		
Leu	Thr	Phe	Phe	Val	Ile	Met	Tyr	Ile	Phe	Ile	His	Thr	Pro	Asn	Thr
		35				40					45				
Leu	Ser	Asp	Phe	Cys	Tyr	Phe	Leu	Gly	Ser	Thr	Ala	Leu	Arg	Leu	Xaa
	50					55					60				

SUBSTITUTE SHEET (RULE 26)

<210> 175
 <211> 43
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (43)
 <223> Xaa equals stop translation

<400> 175
 Met Ile Ser Ala Gln Ser Ser Ile Ser Trp Ala Leu Ile Phe Ile Met
 1 5 10 15
 Ala Pro Ala Leu His Leu Val Leu Arg Phe Pro Ser Lys Phe Lys Pro
 20 25 30
 Glu Arg Lys Gly Glu Ala Arg Ser Pro Lys Xaa
 35 40

<210> 176
 <211> 114
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (114)
 <223> Xaa equals stop translation

<400> 176
 Met Trp Ile Ala Gly Pro Ser Trp Val Pro Leu Arg Tyr Val Val Trp
 1 5 10 15
 Leu Met His Leu Glu Arg Ile Cys Ala Leu His Asn Cys Arg Gly Asn
 20 25 30
 Met Leu Ser Trp Pro Leu Gln Ile Arg Val Ala Val Leu Gly Cys Cys
 35 40 45
 Thr Lys Thr Pro Ala Val Gly Phe Leu Gln Val Ala Gly Ser Pro His
 50 55 60
 Ser Cys Gln Asp Pro Gly Pro Cys Ser His Ser Ala Ala Ile Phe Pro
 65 70 75 80
 Pro Cys Glu Arg Gly Leu Cys Gly Asp Gly Pro Arg Cys Val Arg Gly
 85 90 95
 Cys Val His Cys His Arg Ser Leu Leu His Glu Pro Ala Trp Thr Gln
 100 105 110

SUBSTITUTE SHEET (RULE 26)

Gly Xaa

<210> 177
 <211> 156
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (156)
 <223> Xaa equals stop translation

<400> 177
 Met Ala Ser Ser Leu Ala Phe Leu Leu Leu Asn Phe His Val Ser Leu
 1 5 10 15
 Leu Leu Val Gln Leu Leu Thr Pro Cys Ser Ala Gln Phe Ser Val Leu
 20 25 30
 Gly Pro Ser Gly Pro Ile Leu Ala Met Val Gly Glu Asp Ala Asp Leu
 35 40 45
 Pro Cys His Leu Phe Pro Thr Met Ser Ala Glu Thr Met Glu Leu Lys
 50 55 60
 Trp Val Ser Ser Ser Leu Arg Gln Val Val Asn Val Tyr Ala Asp Gly
 65 70 75 80
 Lys Glu Val Glu Asp Arg Gln Ser Ala Pro Tyr Arg Gly Arg Thr Ser
 85 90 95
 Ile Leu Arg Asp Gly Ile Thr Ala Gly Lys Ala Ala Leu Arg Ile His
 100 105 110
 Asn Val Thr Ala Ser Asp Ser Gly Lys Tyr Leu Cys Tyr Phe Gln Asp
 115 120 125
 Gly Asp Phe Tyr Glu Lys Ala Leu Val Glu Leu Lys Val Ala Ala Leu
 130 135 140
 Gly Ser Asn Leu His Val Gly Ser Glu Gly Leu Xaa
 145 150 155

<210> 178
 <211> 89
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (89)
 <223> Xaa equals stop translation

<400> 178

SUBSTITUTE SHEET (RULE 26)

104

Met Trp Pro Ser Gln Val Pro Leu Leu Ala Phe Cys Phe Leu Leu Val
 1 5 10 15

Lys Ser Thr Ser Asn Ile Asn Leu Pro Thr Pro Pro Pro Ser Ser Leu
 20 25 30

Glu Asn Ser Ser Phe Val Val Ser Gln Arg Gly Asn Leu Ile Val Phe
 35 40 45

Gly Gly Gln Lys Lys Ala Thr Phe Arg Tyr His Phe Tyr Leu Asp Arg
 50 55 60

Met Pro Phe Tyr Ser Gln Ile Ser Val Tyr Phe Val Asn Gly Phe Arg
 65 70 75 80

Val Asn Gly Tyr Leu Cys Asn Asn Xaa
 85

<210> 179

<211> 197

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (197)

<223> Xaa equals stop translation

<400> 179

Met Ala Phe Arg Tyr Leu Ser Trp Ile Leu Phe Pro Leu Leu Gly Cys
 1 5 10 15

Tyr Ala Val Tyr Ser Leu Leu Tyr Leu Glu His Lys Gly Trp Tyr Ser
 20 25 30

Trp Val Leu Ser Met Leu Tyr Gly Phe Leu Leu Thr Phe Gly Phe Ile
 35 40 45

Thr Met Thr Pro Gln Leu Phe Ile Asn Tyr Lys Leu Lys Ser Val Ala
 50 55 60

His Leu Pro Trp Arg Met Leu Thr Tyr Lys Ala Leu Asn Thr Phe Ile
 65 70 75 80

Asp Asp Leu Phe Ala Phe Val Ile Lys Met Pro Val Met Tyr Arg Ile
 85 90 95

Gly Cys Leu Arg Asp Asp Val Val Phe Phe Ile Tyr Leu Tyr Gln Arg
 100 105 110

Trp Ile Tyr Arg Val Asp Pro Thr Arg Val Asn Glu Phe Gly Met Ser
 115 120 125

Gly Glu Asp Pro Thr Ala Ala Ala Pro Val Ala Glu Val Pro Thr Ala
 130 135 140

SUBSTITUTE SHEET (RULE 26)

WO 99/31117

PCT/US98/27059

105

Ala Gly Ala Leu Thr Pro Thr Pro Ala Pro Thr Thr Thr Thr Ala Thr
145 150 155 160
Arg Glu Glu Ala Ser Thr Ser Leu Pro Thr Lys Pro Thr Gln Gly Ala
165 170 175
Ser Ser Ala Ser Glu Pro Gln Glu Ala Pro Pro Lys Pro Ala Glu Asp
180 185 190
Lys Lys Lys Asp Xaa
195

<210> 180
<211> 129
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (129)
<223> Xaa equals stop translation

<400> 180
Met Tyr Glu Cys Phe Leu Ser Leu Ser Leu Leu Lys Ser Cys Lys Ala
1 5 10 15
Val Ser Gly Leu Met Cys Leu Leu Leu Pro Arg Leu Gly Leu Leu Leu
20 25 30
Leu Leu Pro Ser Glu Arg Cys Phe Cys Trp Ile Pro Val Tyr Ser Leu
35 40 45
Ile Thr Cys Leu Ala Glu Cys Ser Val Val Leu Arg Asp Pro Gly Phe
50 55 60
Ala Gly Ala Phe Gln Val His Arg Arg Gln Ala Cys Phe Ser Thr Leu
65 70 75 80
Arg Trp Ser Cys Leu Leu Leu Trp Trp Val Ser Arg Val Ser Ala Gly
85 90 95
Arg Pro Leu Ile Gly Ser Pro His Met Met Ala Pro Ser Thr Phe Cys
100 105 110
Pro Thr Val Arg Gly Pro Gly Thr Cys Ala Ser Ser Asp Pro Asp Gly
115 120 125
Xaa

<210> 181
<211> 155
<212> PRT
<213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

106

<220>

<221> SITE

<222> (155)

<223> Xaa equals stop translation

<400> 181

Met Pro Ala Glu Lys Arg Ile Phe Gly Ala Val Leu Leu Phe Ser Trp
 1 5 10 15

Thr Val Tyr Leu Trp Glu Thr Phe Leu Ala Gln Arg Gln Arg Arg Ile
 20 25 30

Tyr Lys Thr Thr Thr His Val Pro Pro Glu Leu Gly Gln Ile Met Asp
 35 40 45

Ser Glu Thr Phe Glu Lys Ser Arg Leu Tyr Gln Leu Asp Lys Ser Thr
 50 55 60

Phe Ser Phe Trp Ser Gly Leu Tyr Ser Glu Thr Glu Gly Thr Leu Asn
 65 70 75 80

Leu Leu Phe Gly Gly Ile Pro Tyr Leu Trp Arg Leu Ser Gly Arg Phe
 85 90 95

Cys Gly Tyr Ala Gly Phe Gly Pro Glu Tyr Glu Ile Thr Gln Ser Leu
 100 105 110

Val Phe Leu Leu Leu Ala Thr Leu Phe Ser Ala Leu Thr Gly Val Pro
 115 120 125

Trp Ser Leu Tyr Asn Thr Phe Val Ile Lys Lys Thr Trp Leu Gln Ser
 130 135 140

Thr Asp Phe Gly Val Leu His Met Glu Ile Xaa
 145 150 155

<210> 182

<211> 107

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (107)

<223> Xaa equals stop translation

<400> 182

Met Ser Leu Ser Trp Met Val His Leu Leu Gly Leu Pro Asn Gly Thr
 1 5 10 15

Val Trp Tyr Leu Pro Phe Val Cys Phe Thr Arg Gly Ser Pro Met Gly
 20 25 30

Gly Gly Ser Gly Gln Trp Arg Trp Asp Arg Lys Phe Ser Lys Thr Leu
 35 40 45

SUBSTITUTE SHEET (RULE 26)

107

Leu Gly Asn Leu Phe Val Ala Phe Lys Glu Met Cys Gly Glu Asp Ile
 50 55 60

Trp Met Leu Ala Ala Ile Leu Glu Leu Arg Thr Gln Glu Trp Trp Lys
 65 70 75 80

Gly Arg Arg Asn Arg Val Phe Val Ala Val Val Lys Leu Leu Lys Phe
 85 90 95

Pro Ser Cys Gln Ala Ser Cys Tyr Met Arg Xaa
 100 105

<210> 183

<211> 48

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (48)

<223> Xaa equals stop translation

<400> 183

Met Ile Asn Glu Trp Cys Phe Lys Leu Leu Ser Leu Trp Ser Phe Ala
 1 5 10 15

Tyr Ser Asn Cys Lys Leu Ile His Lys Cys Lys Phe Val Phe Leu Lys
 20 25 30

Lys Lys Lys Thr Gly Lys Glu Val Ser Val Lys Gly Ser Lys Leu Xaa
 35 40 45

<210> 184

<211> 127

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (127)

<223> Xaa equals stop translation

<400> 184

Met Trp Leu Gly Ser Trp Leu Thr Ser Leu Leu Leu Ser Pro Tyr Gly
 1 5 10 15

Ser Gly Trp Glu Lys Val Pro Cys Cys Val Thr Gly His Leu Arg Ser
 20 25 30

Cys Ser Cys Cys Leu Leu Gly Leu Ala Gly Val Gln Ser Asp His Phe
 35 40 45

SUBSTITUTE SHEET (RULE 26)

108

Ser Glu Gly Phe Phe Ser Glu Tyr Ser Ser Asp Val Leu Pro Trp Gly
 50 55 60

Arg Arg Ser Phe Leu Pro Gln Gly Asp Ala Ser Leu Leu Ala Cys Glu
 65 70 75 80

Cys Phe Leu His Leu Gln Val Val Trp Gly Gln Phe Cys Leu Leu Glu
 85 90 95

Ala Trp Ala Gly Phe Thr Glu Gly Ser Met Pro Ala Pro Ser Cys Arg
 100 105 110

Val His Phe Trp Cys Arg Val Asn Thr Cys Pro Phe Met Ser Xaa
 115 120 125

<210> 185

<211> 87

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (87)

<223> Xaa equals stop translation

<400> 185

Met Leu Cys Gly Tyr Val Ile Asn Asn Ile Trp Leu Ile Phe Thr Tyr
 1 5 10 15

Phe Ile Cys Ile Tyr Ile Ser Arg Ser Tyr Ile Tyr Ile Thr Gln Glu
 20 25 30

Thr Gln Val Ile Tyr Ile Cys Gln Glu Met Tyr Asp Tyr Phe Gly Glu
 35 40 45

Asn Gly Pro Lys Cys Glu Lys Asp Ile Lys Lys Thr Lys Lys Thr Lys
 50 55 60

Lys Lys His Tyr Phe Pro Leu Arg Asn Ile Leu Tyr Ile Ser Lys Glu
 65 70 75 80

Glu Lys Leu Lys Asp Ile Xaa
 85

<210> 186

<211> 58

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (58)

<223> Xaa equals stop translation

<400> 186

SUBSTITUTE SHEET (RULE 26)

109

Met Ile Val Ser Tyr Arg Ile Val Ser Leu Pro Ser Ser Val Leu Cys
 1 5 10 15
 Leu Phe Ile Pro Pro Phe Leu Leu Ile Phe Tyr Cys Leu His Ser Phe
 20 25 30
 Val Phe Ser Gln Met Leu Tyr Ser Trp Asn Tyr His Val Thr Phe Gln
 35 40 45
 Met Ala Phe Ser Leu Ile Ile Cys Val Xaa
 50 55

<210> 187

<211> 69

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (69)

<223> Xaa equals stop translation

<400> 187

Met Val Ala Ser Gln Ala Trp Trp Leu Ser Asn Leu Trp His Leu Trp
 1 5 10 15
 Glu Val Gly Ser Ala Gln Gly Leu Pro Leu Asp Pro Pro Ala Leu Ala
 20 25 30
 Pro Tyr Leu Pro Trp Ala Leu Arg Trp Pro Cys Phe Ser Gly Phe Ala
 35 40 45
 Ser Leu Ala Gly Ala Leu Val Leu Ala His Ser Leu Pro Thr Ala Trp
 50 55 60
 Pro Gly Ser Ser Xaa
 65

<210> 188

<211> 48

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (48)

<223> Xaa equals stop translation

<400> 188

Met Tyr Leu Phe Leu Leu Cys Cys Phe Ile Ser Glu His Cys Ala Gln
 1 5 10 15
 His Ser Phe Pro His Thr Cys Pro Asn Trp Lys Thr Arg Val Leu Ser
 20 25 30

SUBSTITUTE SHEET (RULE 26)

110

Phe Pro Leu His Pro Cys Pro His Leu Ile His Pro Asn Asn Thr Xaa
 35 40 45

<210> 189

<211> 51

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (51)

<223> Xaa equals stop translation

<400> 189

Met Leu Ser Ser Xaa Tyr Val Pro Met Cys Gln His Phe Ile Tyr Pro
 1 5 10 15

Val Leu Trp Val Leu Val His Phe Phe Ser Phe Ile Gln Ile Gln Lys
 20 25 30

Asn Thr Asp Gly Ser Asn Val Lys Leu Thr Arg Asn Pro Gly Thr Phe
 35 40 45

Ile Ser Xaa
 50

<210> 190

<211> 56

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (56)

<223> Xaa equals stop translation

<400> 190

Met Ala Val Arg Val Leu Trp Gly Gly Leu Ser Leu Leu Arg Val Leu
 1 5 10 15

Trp Cys Leu Leu Pro Gln Thr Gly Tyr Val His Pro Asp Glu Phe Phe
 20 25 30

Gln Ser Pro Glu Val Met Ala Gly Lys Thr Pro His Val Trp Leu Arg
 35 40 45

Gln Ala Ala Ala Glu Ser Ala Xaa

SUBSTITUTE SHEET (RULE 26)

111

50

55

<210> 191
 <211> 127
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (127)
 <223> Xaa equals stop translation

<400> 191
 Met Cys Ser Ser Phe Pro Arg Met Ala Leu Cys Ala Leu Trp Met Trp
 1 5 10 15
 Pro Ser Val Lys Ser Ser Val Pro Leu Pro Leu Arg Glu Pro Phe Leu
 20 25 30
 Trp Arg Ser Pro Gly Ser Gln Cys Leu Leu Cys Leu Gln Thr Ile His
 35 40 45
 Val Ser Cys Ser Glu Ala Cys Pro Leu Leu Glu Asn Ile Ser Lys Asn
 50 55 60
 Cys Thr Ile Pro Gln Arg Asp Leu Asp Asn Met Ala Phe Pro Gln Ala
 65 70 75 80
 Leu Pro Leu Glu Lys Arg Cys Glu Arg Phe Leu Gln Lys Ser Tyr Arg
 85 90 95
 Lys Leu Glu Lys Asn Pro Glu Lys Glu Glu His Trp Ala Arg Leu
 100 105 110
 Gln Arg Tyr Ser Leu Ser Leu Gln Arg Glu Asn Phe Lys Lys Xaa
 115 120 125

<210> 192
 <211> 70
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (70)
 <223> Xaa equals stop translation

<400> 192
 Met Pro Phe Gln Leu Pro Leu Gln Leu Leu Leu Arg Leu Ile Cys
 1 5 10 15
 Glu Phe Phe Leu Ala Pro Ala Leu Asn Cys Asn Leu Thr Gly Thr Val
 20 25 30
 Ile Phe Phe Thr Leu Met Ile Ser Leu Gln Leu Met Ile Phe Phe Thr

SUBSTITUTE SHEET (RULE 26)

112

35 40 45
 Leu Gln Phe Ala Asp Gly Phe Gln Ile Gly Val Asp Leu Gln Leu Ser
 50 55 60
 Glu Leu Asn Ile Leu Xaa
 65 70

<210> 193
 <211> 71
 <212> PRT
 <213> Homo sapiens

 <220>
 <221> SITE
 <222> (71)
 <223> Xaa equals stop translation

<400> 193
 Met Ile Ser Gly Val Leu Ile Phe Asn Leu Ile Ala Ser Ser Trp Val
 1 5 10 15
 Leu Cys Phe Pro Leu Cys Asp Leu Ser Cys Gln Lys Thr Leu Arg Ile
 20 25 30
 Phe Phe Ala Ser Phe Phe His Ala Val Cys Val His Val Ser Cys Thr
 35 40 45
 Ser Trp Gln Pro Leu Val Leu Phe Ile Lys Trp Trp Val Val Gly Cys
 50 55 60
 Ser Pro Ala Val Ser Leu Xaa
 65 70

<210> 194
 <211> 130
 <212> PRT
 <213> Homo sapiens

 <220>
 <221> SITE
 <222> (130)
 <223> Xaa equals stop translation

<400> 194
 Met His Val Leu Pro Leu Leu Leu Ser Leu Leu Leu Leu Leu Leu
 1 5 10 15
 Leu Ser Ala Ser Phe Val Thr Phe Ser Thr Pro Thr Ser Ser Arg Asn
 20 25 30
 Ser Ser Cys Pro Asp Cys Glu Ser Leu Asn Thr Gly Leu Pro Ser Leu
 35 40 45
 Met Met Phe Gly Gly Ser Leu Leu Lys Trp Val Gln Asn Thr His Gly

SUBSTITUTE SHEET (RULE 26)

Ile Pro Ala Val Leu Thr Leu Leu Val Gly Leu Asn Pro Glu Val Thr

114

20	25	30
Gly Asn Val Ile Trp Lys Ser Ile Ser Ala Ile His Ile Leu Phe Cys		
35	40	45
Thr Val Trp Ala Val Gly Leu Ala Ser Tyr Leu Leu His Arg Thr Gln		
50	55	60
Gln Asn Ile Leu His Glu Glu Gly Arg Ser Cys Leu Val Trp Xaa		
65	70	75
		80

<210> 197
 <211> 42
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (42)
 <223> Xaa equals stop translation

<400> 197
 Met Lys His Met Asn Thr Leu Pro Ile Phe Ser Ser Leu Ile Ser Phe
 1 5 10 15
 Leu Pro Ala Val Ser Ala Gly Arg Ser Ala Ile Thr Thr Leu Cys Asn
 20 25 30
 Ile Thr Glu Gln Leu Glu Val Leu Gly Xaa
 35 40

<210> 198
 <211> 197
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (197)
 <223> Xaa equals stop translation

<400> 198
 Met Lys Tyr Leu Arg His Arg Arg Pro Asn Ala Thr Leu Ile Leu Ala
 1 5 10 15
 Ile Gly Ala Phe Thr Leu Leu Leu Phe Ser Leu Leu Val Ser Pro Pro
 20 25 30
 Thr Cys Lys Val Gln Glu Gln Pro Pro Ala Ile Pro Glu Ala Leu Ala
 35 40 45
 Trp Pro Thr Pro Pro Thr Arg Pro Ala Pro Ala Pro Cys His Ala Asn

SUBSTITUTE SHEET (RULE 26)

115

50	55	60
Thr Ser Met Val Thr His Pro Asp Phe Ala Thr Gln Pro Gln His Val		
65	70	75 80
Gln Asn Phe Leu Leu Tyr Arg His Cys Arg His Phe Pro Leu Leu Gln		
	85	90 95
Asp Val Pro Pro Ser Lys Cys Ala Gln Pro Val Phe Leu Leu Leu Val		
	100	105 110
Ile Lys Ser Ser Pro Ser Asn Tyr Val Arg Arg Glu Leu Leu Arg Arg		
	115	120 125
Thr Trp Gly Arg Glu Arg Lys Val Arg Gly Leu Gln Leu Arg Leu Leu		
	130	135 140
Phe Leu Val Gly Thr Ala Ser Asn Pro His Glu Ala Arg Lys Val Asn		
145	150	155 160
Arg Leu Leu Glu Leu Glu Ala Gln Thr His Gly Asp Ile Leu Gln Trp		
	165	170 175
Asp Phe His Asp Ser Phe Phe Asn Leu Thr Leu Lys Gln Val Arg Trp		
	180	185 190
Thr Gly Val Thr Xaa		
195		

<210> 199

<211> 124

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (124)

<223> Xaa equals stop translation

<400> 199

Met Lys Leu Leu Leu Leu Ala Leu Pro Met Leu Val Leu Leu Pro Gln
1 5 10 15

Val Ile Pro Ala Tyr Ser Gly Glu Lys Lys Cys Trp Asn Arg Ser Gly
20 25 30

His Cys Arg Lys Gln Cys Lys Asp Gly Glu Ala Val Lys Asp Thr Cys
35 40 45

Lys Asn Leu Arg Ala Cys Cys Ile Pro Ser Asn Glu Asp His Arg Arg
50 55 60

Val Pro Ala Thr Ser Pro Thr Pro Leu Ser Asp Ser Thr Pro Gly Ile
65 70 75 80

Ile Asp Asp Ile Leu Thr Val Arg Phe Thr Thr Asp Tyr Phe Glu Val

SUBSTITUTE SHEET (RULE 26)

116
85 90 95

Ser Ser Lys Lys Asp Met Val Glu Glu Ser Glu Ala Gly Arg Gly Thr
 100 105 110

Glu Thr Ser Leu Pro Asn Val His His Ser Ser Xaa
 115 120

<210> 200
<211> 549
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (132)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (398)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 200
Met Gly Asn Ala Cys Ile Pro Leu Lys Arg Ile Ala Tyr Phe Leu Cys
 1 5 10 15

Leu Leu Ser Ala Leu Leu Leu Thr Glu Gly Lys Lys Pro Ala Lys Pro
 20 25 30

Lys Cys Pro Ala Val Cys Thr Cys Thr Lys Asp Asn Ala Leu Cys Glu
 35 40 45

Asn Ala Arg Ser Ile Pro Arg Thr Val Pro Pro Asp Val Ile Ser Leu
 50 55 60

Ser Phe Val Arg Ser Gly Phe Thr Glu Ile Ser Glu Gly Ser Phe Leu
 65 70 75 80

Phe Thr Pro Ser Leu Gln Leu Leu Leu Phe Thr Ser Asn Ser Phe Asp
 85 90 95

Val Ile Ser Asp Asp Ala Phe Ile Gly Leu Pro His Leu Glu Tyr Leu
 100 105 110

Phe Ile Glu Asn Asn Asn Ile Lys Ser Ile Ser Arg His Thr Phe Arg
 115 120 125

Gly Leu Lys Xaa Leu Ile His Leu Ser Leu Ala Asn Asn Asn Leu Gln
 130 135 140

Thr Leu Pro Lys Asp Ile Phe Lys Gly Leu Asp Ser Leu Thr Asn Val
 145 150 155 160

Asp Leu Arg Gly Asn Ser Phe Asn Cys Asp Cys Lys Leu Lys Trp Leu
 165 170 175

SUBSTITUTE SHEET (RULE 26)

Val	Glu	Trp	Leu	Gly	His	Thr	Asn	Ala	Thr	Val	Glu	Asp	Ile	Tyr	Cys	180	185	190
Glu	Gly	Pro	Pro	Glu	Tyr	Lys	Lys	Arg	Lys	Ile	Asn	Ser	Leu	Ser	Ser	195	200	205
Lys	Asp	Phe	Asp	Cys	Ile	Ile	Thr	Glu	Phe	Ala	Lys	Ser	Gln	Asp	Leu	210	215	220
Pro	Tyr	Gln	Ser	Leu	Ser	Ile	Asp	Thr	Phe	Ser	Tyr	Leu	Asn	Asp	Glu	225	230	235
Tyr	Val	Val	Ile	Ala	Gln	Pro	Phe	Thr	Gly	Lys	Cys	Ile	Phe	Leu	Glu	245	250	255
Trp	Asp	His	Val	Glu	Lys	Thr	Phe	Arg	Asn	Tyr	Asp	Asn	Ile	Thr	Gly	260	265	270
Thr	Ser	Thr	Val	Val	Cys	Lys	Pro	Ile	Val	Ile	Glu	Thr	Gln	Leu	Tyr	275	280	285
Val	Ile	Val	Ala	Gln	Leu	Phe	Gly	Gly	Ser	His	Ile	Tyr	Lys	Arg	Asp	290	295	300
Ser	Phe	Ala	Asn	Lys	Phe	Ile	Lys	Ile	Gln	Asp	Ile	Glu	Ile	Leu	Lys	305	310	315
Ile	Arg	Lys	Pro	Asn	Asp	Ile	Glu	Thr	Phe	Lys	Ile	Glu	Asn	Asn	Trp	325	330	335
Tyr	Phe	Val	Val	Ala	Asp	Ser	Ser	Lys	Ala	Gly	Phe	Thr	Thr	Ile	Tyr	340	345	350
Lys	Trp	Asn	Gly	Asn	Gly	Phe	Tyr	Ser	His	Gln	Ser	Leu	His	Ala	Trp	355	360	365
Tyr	Arg	Asp	Thr	Asp	Val	Glu	Tyr	Leu	Glu	Ile	Val	Arg	Thr	Pro	Gln	370	375	380
Thr	Leu	Arg	Thr	Pro	His	Leu	Ile	Leu	Ser	Ser	Ser	Ser	Xaa	Arg	Pro	385	390	395
Val	Ile	Tyr	Gln	Trp	Asn	Lys	Ala	Thr	Gln	Leu	Phe	Thr	Asn	Gln	Thr	405	410	415
Asp	Ile	Pro	Asn	Met	Glu	Asp	Val	Tyr	Ala	Val	Lys	His	Phe	Ser	Val	420	425	430
Lys	Gly	Asp	Val	Tyr	Ile	Cys	Leu	Thr	Arg	Phe	Ile	Gly	Asp	Ser	Lys	435	440	445
Val	Met	Lys	Trp	Gly	Gly	Ser	Ser	Phe	Gln	Asp	Ile	Gln	Arg	Met	Pro	450	455	460
Ser	Arg	Gly	Ser	Met	Val	Phe	Gln	Pro	Leu	Gln	Ile	Asn	Asn	Tyr	Gln	465	470	475

SUBSTITUTE SHEET (RULE 26)

118

Tyr Ala Ile Leu Gly Ser Asp Tyr Ser Phe Thr Gln Val Tyr Asn Trp
 485 490 495
 Asp Ala Glu Lys Ala Lys Phe Val Lys Phe Gln Glu Leu Asn Val Gln
 500 505 510
 Ala Pro Arg Ser Phe Thr His Val Ser Ile Asn Lys Arg Asn Phe Leu
 515 520 525
 Phe Ala Ser Ser Phe Lys Gly Asn Thr Gln Ile Tyr Lys His Val Ile
 530 535 540
 Val Asp Leu Ser Ala
 545

<210> 201
 <211> 488
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (344)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (416)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (429)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (430)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 201
 Met Ile Leu Ser Leu Leu Phe Ser Leu Gly Gly Pro Leu Gly Trp Gly
 1 5 10 15
 Leu Leu Gly Ala Trp Ala Gln Ala Ser Ser Thr Ser Leu Ser Asp Leu
 20 25 30
 Gln Ser Ser Arg Thr Pro Gly Val Trp Lys Ala Glu Ala Glu Asp Thr
 35 40 45
 Ser Lys Asp Pro Val Gly Arg Asn Trp Cys Pro Tyr Pro Met Ser Lys
 50 55 60
 Leu Val Thr Leu Leu Ala Leu Cys Lys Thr Glu Lys Phe Leu Ile His
 65 70 75 80

SUBSTITUTE SHEET (RULE 26)

Ser Gln Gln Pro Cys Pro Gln Gly Ala Pro Asp Cys Gln Lys Val Lys
 85 90 95
 Val Met Tyr Arg Met Ala His Lys Pro Val Tyr Gln Val Lys Gln Lys
 100 105 110
 Val Leu Thr Ser Leu Ala Trp Arg Cys Cys Pro Gly Tyr Thr Gly Pro
 115 120 125
 Asn Cys Glu His His Asp Ser Met Ala Ile Pro Glu Pro Ala Asp Pro
 130 135 140
 Gly Asp Ser His Gln Glu Pro Gln Asp Gly Pro Val Ser Phe Lys Pro
 145 150 155 160
 Gly His Leu Ala Ala Val Ile Asn Glu Val Glu Val Gln Gln Glu Gln
 165 170 175
 Gln Glu His Leu Leu Gly Asp Leu Gln Asn Asp Val His Arg Val Ala
 180 185 190
 Asp Ser Leu Pro Gly Leu Trp Lys Ala Leu Pro Gly Asn Leu Thr Ala
 195 200 205
 Ala Val Met Glu Ala Asn Gln Thr Gly His Glu Phe Pro Asp Arg Ser
 210 215 220
 Leu Glu Gln Val Leu Leu Pro His Val Asp Thr Phe Leu Gln Val His
 225 230 235 240
 Phe Ser Pro Ile Trp Arg Ser Phe Asn Gln Ser Leu His Ser Leu Thr
 245 250 255
 Gln Ala Ile Arg Asn Leu Ser Leu Asp Val Glu Ala Asn Arg Gln Ala
 260 265 270
 Ile Ser Arg Val Gln Asp Ser Ala Val Ala Arg Ala Asp Phe Gln Glu
 275 280 285
 Leu Gly Ala Lys Phe Glu Ala Lys Val Gln Glu Asn Thr Gln Arg Val
 290 295 300
 Gly Gln Leu Arg Gln Asp Val Glu Glu Arg Leu His Ala Gln His Phe
 305 310 315 320
 Thr Leu His Arg Ser Ile Ser Glu Leu Gln Ala Asp Val Asp Thr Lys
 325 330 335
 Leu Lys Arg Leu His Lys Ala Xaa Glu Ala Pro Gly Thr Asn Gly Ser
 340 345 350
 Leu Val Leu Ala Thr Pro Gly Ala Gly Ala Arg Pro Glu Pro Asp Ser
 355 360 365
 Leu Gln Ala Arg Leu Gly Gln Leu Gln Arg Asn Leu Ser Glu Leu His
 370 375 380

SUBSTITUTE SHEET (RULE 26)

120

Met Thr Thr Ala Arg Arg Glu Glu Glu Leu Gln Tyr Thr Leu Glu Asp
 385 390 395 400

Met Arg Ala Thr Leu Thr Arg His Val Asp Glu Ile Lys Glu Leu Xaa
 405 410 415

Ser Glu Ser Asp Glu Thr Phe Asp Gln Ile Ser Lys Xaa Xaa Arg Gln
 420 425 430

Val Glu Glu Leu Gln Val Asn His Thr Ala Leu Arg Glu Leu Arg Val
 435 440 445

Ile Leu Met Glu Lys Ser Leu Ile Met Glu Glu Asn Lys Glu Glu Val
 450 455 460

Glu Arg Gln Leu Leu Glu Leu Asn Leu Thr Leu Gln His Leu Gln Gly
 465 470 475 480

Gly Met Pro Thr Ser Ser Ser Thr
 485

<210> 202
 <211> 86
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (86)
 <223> Xaa equals stop translation

<400> 202
 Met Ala His Gly Pro Gln Ser Leu Trp Ser Leu Gly Phe Thr Val Thr
 1 5 10 15

Leu Thr Phe Glu Leu Pro Val Gly Cys Val Leu Gly Arg Ile Cys His
 20 25 30

Pro Ile Gln Ala Cys Asn Thr Gly Leu Met Thr Pro Thr Pro Gln Gly
 35 40 45

Pro Cys Arg Thr Glu Met Met Ser Asn Asp Lys Pro Trp Leu Pro Ala
 50 55 60

Asn Ala Pro Ala His Ile Ser Leu Pro Gly Ala Arg Leu Thr Ser Thr
 65 70 75 80

Cys Ala Pro Gly Leu Xaa
 85

<210> 203
 <211> 400
 <212> PRT
 <213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

<220>

<221> SITE

<222> (400)

<223> Xaa equals stop translation

<400> 203

Met Ala Ile His Lys Ala Leu Val Met Cys Leu Gly Leu Pro Leu Phe
 1 5 10 15

Leu Phe Pro Gly Ala Trp Ala Gln Gly His Val Pro Pro Gly Cys Ser
 20 25 30

Gln Gly Leu Asn Pro Leu Tyr Tyr Asn Leu Cys Asp Arg Ser Gly Ala
 35 40 45

Trp Gly Ile Val Leu Glu Ala Val Ala Gly Ala Gly Ile Val Thr Thr
 50 55 60

Phe Val Leu Thr Ile Ile Leu Val Ala Ser Leu Pro Phe Val Gln Asp
 65 70 75 80

Thr Lys Lys Arg Ser Leu Leu Gly Thr Gln Val Phe Phe Leu Leu Gly
 85 90 95

Thr Leu Gly Leu Phe Cys Leu Val Phe Ala Cys Val Val Lys Pro Asp
 100 105 110

Phe Ser Thr Cys Ala Ser Arg Arg Phe Leu Phe Gly Val Leu Phe Ala
 115 120 125

Ile Cys Phe Ser Cys Leu Ala Ala His Val Phe Ala Leu Asn Phe Leu
 130 135 140

Ala Arg Lys Asn His Gly Pro Arg Gly Trp Val Ile Phe Thr Val Ala
 145 150 155 160

Leu Leu Leu Thr Leu Val Glu Val Ile Ile Asn Thr Glu Trp Leu Ile
 165 170 175

Ile Thr Leu Val Arg Gly Ser Gly Glu Gly Gly Pro Gln Gly Asn Ser
 180 185 190

Ser Ala Gly Trp Ala Val Ala Ser Pro Cys Ala Ile Ala Asn Met Asp
 195 200 205

Phe Val Met Ala Leu Ile Tyr Val Met Leu Leu Leu Leu Gly Ala Phe
 210 215 220

Leu Gly Ala Trp Pro Ala Leu Cys Gly Arg Tyr Lys Arg Trp Arg Lys
 225 230 235 240

His Gly Val Phe Val Leu Leu Thr Thr Ala Thr Ser Val Ala Ile Trp
 245 250 255

Val Val Trp Ile Val Met Tyr Thr Tyr Gly Asn Lys Gln His Asn Ser
 260 265 270

SUBSTITUTE SHEET (RULE 26)

122

Pro Thr Trp Asp Asp Pro Thr Leu Ala Ile Ala Leu Ala Ala Asn Ala
 275 280 285

Trp Ala Phe Val Leu Phe Tyr Val Ile Pro Glu Val Ser Gln Val Thr
 290 295 300

Lys Ser Ser Pro Glu Gln Ser Tyr Gln Gly Asp Met Tyr Pro Thr Arg
 305 310 315 320

Gly Val Gly Tyr Glu Thr Ile Leu Lys Glu Gln Lys Gly Gln Ser Met
 325 330 335

Phe Val Glu Asn Lys Ala Phe Ser Met Asp Glu Pro Val Ala Ala Lys
 340 345 350

Arg Pro Val Ser Pro Tyr Ser Gly Tyr Asn Gly Gln Leu Leu Thr Ser
 355 360 365

Val Tyr Gln Pro Thr Glu Met Ala Leu Met His Lys Val Pro Ser Glu
 370 375 380

Glu Leu Thr Thr Ser Ser Ser His Gly Pro Pro Pro Thr Ala Arg Xaa
 385 390 395 400

<210> 204

<211> 195

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (195)

<223> Xaa equals stop translation

<400> 204

Met Ser Thr Ala Phe Cys Pro Ile His Ser Ser Leu Gly Ser Met Val
 1 5 10 15

Met Cys Leu Cys Ile Leu Ser Pro Leu Cys Ile Ala Ser Lys Ser Leu
 20 25 30

Arg Val Cys Thr Lys Ser Tyr Met Glu Gly His Gly Lys Thr Arg Val
 35 40 45

Pro Val Val Leu Val Gly Asn Lys Ala Asp Leu Ser Pro Glu Arg Glu
 50 55 60

Val Gln Ala Val Glu Gly Lys Lys Leu Ala Glu Ser Trp Gly Ala Thr
 65 70 75 80

Phe Met Glu Ser Ser Ala Arg Glu Asn Gln Leu Thr Gln Gly Ile Phe
 85 90 95

SUBSTITUTE SHEET (RULE 26)

123

Thr Lys Val Ile Gln Glu Ile Ala Arg Val Gly Glu Phe Leu Trp Ala
 100 105 110
 Arg Ala Ser Leu Pro Ser His Val Ser Pro Trp Val Trp Gly Asn Cys
 115 120 125
 Leu Ala Ser Ala Pro Gly Thr Cys His Val Pro Val Gly Gly Arg Ser
 130 135 140
 Ser Gly Leu His Gly Tyr Gly Cys Gln Leu Cys Ser Trp Pro Leu Asp
 145 150 155 160
 Thr Gln Cys Gly Ile Leu Met Phe Ala His Phe Pro Gln Ala Pro Val
 165 170 175
 Ala Trp Met Ser Met Phe Thr Lys Gly Gln Gly Pro Leu Met Asp Thr
 180 185 190
 Gly Leu Xaa
 195

<210> 205
 <211> 57
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (57)
 <223> Xaa equals stop translation

<400> 205
 Met Pro Leu Glu Glu Ser Phe Glu Ile Val Leu Lys Leu Val Pro Leu
 1 5 10 15
 Leu Gly Leu Glu Leu Phe Phe Phe Leu Phe Ile Ile Asn Gly Tyr Ile
 20 25 30
 Asn Val Tyr Cys Pro Ser Gln Tyr Phe Ile Tyr Ala Lys Asp Ser Leu
 35 40 45
 Ala Gly Leu Ala Leu Ile Pro Gln Xaa
 50 55

<210> 206
 <211> 73
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (73)
 <223> Xaa equals stop translation

SUBSTITUTE SHEET (RULE 26)

124

<400> 206

Met Ile Val Ile Tyr Leu Thr Leu Thr Trp Thr Phe Leu Ile Asn Leu
1 5 10 15

Leu Ala Cys Pro Leu Tyr His Leu Pro Gln Met Gln Lys Lys Ala Lys
20 25 30

Pro Glu Thr Lys Lys Ala Lys Pro Glu Thr Lys Glu Thr Ile Gln Arg
35 40 45

Gln Arg Asn Leu Phe Leu Val Leu Leu Lys Gln Leu Ala Gly Lys Lys
50 55 60

Cys Ser Ala Leu Phe Leu Ile Val Xaa
65 70

<210> 207

<211> 85

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (85)

<223> Xaa equals stop translation

<400> 207

Met Val Trp Cys Gln Cys Leu Cys Pro Leu Cys Ala Cys Trp Glu Glu
1 5 10 15

Ala Gln Ala Leu Trp Trp Pro Pro Leu Cys Thr Trp Pro Gly Glu Ala
20 25 30

Arg Gly Ser Gly Ala Ser Leu Arg Leu Arg Pro Pro Leu Gln Asn Lys
35 40 45

Leu Ser Pro Gly Val Cys Leu Ser Leu Phe Leu Ser Pro Glu Arg Asn
50 55 60

Ala Gly Val Pro Glu Ala Ser Leu Gln Thr Lys His Pro Cys Thr Ser
65 70 75 80

Tyr Gly Ser Gly Xaa
85

<210> 208

<211> 195

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (195)

<223> Xaa equals stop translation

SUBSTITUTE SHEET (RULE 26)

125

<400> 208

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Met Trp Val Ser Leu Tyr Phe Gly Ile Leu Gly Leu Cys Ser Val Ile
 1             5             10             15

Thr Gly Gly Cys Ile Ile Phe Leu His Trp Arg Lys Asn Leu Arg Arg
          20             25             30

Glu Glu His Ala Gln Gln Trp Val Glu Val Met Arg Ala Ala Thr Phe
          35             40             45

Thr Tyr Ser Pro Leu Leu Tyr Trp Ile Asn Lys Arg Arg Arg Tyr Gly
          50             55             60

Met Asn Ala Ala Ile Asn Thr Gly Pro Ala Pro Ala Val Thr Lys Thr
          65             70             75             80

Glu Thr Glu Val Gln Asn Pro Asp Val Leu Trp Asp Leu Asp Ile Pro
          85             90             95

Glu Gly Arg Ser His Ala Asp Gln Asp Ser Asn Pro Lys Ala Glu Ala
          100             105             110

Pro Ala Pro Leu Gln Pro Ala Leu Gln Leu Ala Pro Gln Gln Pro Gln
          115             120             125

Ala Arg Ser Pro Phe Pro Leu Pro Ile Phe Gln Glu Val Pro Phe Ala
          130             135             140

Pro Pro Leu Cys Asn Leu Pro Pro Leu Leu Asn His Ser Val Ser Tyr
          145             150             155             160

Pro Leu Ala Thr Cys Pro Glu Arg Asn Val Leu Phe His Ser Leu Leu
          165             170             175

Asn Leu Ala Gln Glu Asp His Ser Phe Asn Ala Lys Pro Phe Pro Ser
          180             185             190

Glu Leu Xaa
          195

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<210> 209

<211> 42

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (42)

<223> Xaa equals stop translation

<400> 209

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Met Leu Gln Arg Gly Gln His Leu Tyr Leu Val Val Phe Leu Met Val
 1             5             10             15

Ser Phe Ile Pro Leu Leu Asn Pro Lys Gln Asp Leu Lys Lys Leu Lys
          20             25             30

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SUBSTITUTE SHEET (RULE 26)

126

Lys Asn Arg Thr Val Arg Asn His Phe Xaa
 35 40

<210> 210

<211> 282

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (282)

<223> Xaa equals stop translation

<400> 210

Met Ser Ile Leu Thr Met Ile Ser Ser Trp Pro Phe Ser Arg Val Val
 1 5 10 15

Arg Phe Trp Phe Leu His Gln Met Val Leu Asp Leu Cys Leu Gly Gln
 20 25 30

Gly Val Pro Gln Gln Asn Leu Gly Lys Pro Lys Gly Lys Lys Lys Leu
 35 40 45

Ser Ser Val Arg Gln Lys Phe Asp His Arg Phe Gln Pro Gln Asn Pro
 50 55 60

Leu Ser Gly Ala Gln Gln Phe Val Ala Lys Asp Pro Gln Asp Asp Asp
 65 70 75 80

Asp Leu Lys Leu Cys Ser His Thr Met Met Leu Pro Thr Arg Gly Gln
 85 90 95

Leu Glu Gly Arg Met Ile Val Thr Ala Tyr Glu His Gly Leu Asp Asn
 100 105 110

Val Thr Glu Glu Ala Val Ser Ala Val Val Tyr Ala Val Glu Asn His
 115 120 125

Leu Lys Asp Ile Leu Thr Ser Val Val Ser Arg Arg Lys Ala Tyr Arg
 130 135 140

Leu Arg Asp Gly His Phe Lys Tyr Ala Phe Gly Ser Asn Val Thr Pro
 145 150 155 160

Gln Pro Tyr Leu Lys Asn Ser Val Val Ala Tyr Asn Asn Leu Ile Glu
 165 170 175

Ser Pro Pro Ala Phe Thr Ala Pro Cys Ala Gly Gln Asn Pro Ala Ser
 180 185 190

His Pro Pro Pro Asp Asp Ala Glu Gln Gln Ala Ala Leu Leu Leu Ala
 195 200 205

Cys Ser Gly Asp Thr Leu Pro Ala Ser Leu Pro Pro Val Asn Met Tyr
 210 215 220

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Asp Leu Phe Glu Ala Leu Gln Val His Arg Glu Val Ile Pro Thr His
 225 230 235 240

Thr Val Tyr Ala Leu Asn Ile Glu Arg Ile Ile Thr Lys Leu Trp His
 245 250 255

Pro Asn His Glu Glu Leu Gln Gln Asp Lys Val His Arg Gln Arg Leu
 260 265 270

Ala Ala Lys Glu Gly Leu Leu Leu Cys Xaa
 275 280

<210> 211
 <211> 48
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (48)
 <223> Xaa equals stop translation

<400> 211
 Met Pro Lys Thr Cys Leu Pro Ile Leu Cys Leu Pro Leu Thr Gln Ala
 1 5 10 15

Val Val Leu Ala Gln Leu Asn Asn Phe Ser Ser Leu Asn Ile Phe Ile
 20 25 30

Phe Lys Ile Lys Asn Lys Met Tyr Tyr Ile Trp Ile Tyr Asp Lys Xaa
 35 40 45

<210> 212
 <211> 59
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (59)
 <223> Xaa equals stop translation

<400> 212
 Met Trp Pro Cys Cys Leu Asp Ser Leu Leu Phe Gly Phe Trp Leu Trp
 1 5 10 15

Ala Gln Gly Ile Thr Leu Leu Ser Glu Asp Ser Ile Arg Ile Val Cys
 20 25 30

Ser Ser Cys Glu Pro Glu Val Leu His Val Pro Thr Pro Val Tyr Arg
 35 40 45

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128

Pro Cys Pro Ser His Ser Pro Leu Thr Phe Xaa
 50 55

<210> 213
 <211> 43
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (43)
 <223> Xaa equals stop translation

<400> 213
 Met Ala Leu Gln Ser Ile Pro Ser Phe Thr Leu Leu Ile Ser Phe Phe
 1 5 10 15

Leu Ser Thr Gln Cys Leu Arg Cys Val Tyr Asn Tyr Glu Cys Ile Leu
 20 25 30

Phe Met Ala Phe Asn Cys Arg Met Val Phe Xaa
 35 40

<210> 214
 <211> 53
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (53)
 <223> Xaa equals stop translation

<400> 214
 Met Pro Ala Val Ser Ala Phe Phe Ser Leu Ala Ala Leu Ala Glu Val
 1 5 10 15

Ala Ala Met Glu Asn Val His Arg Gly Gln Arg Ser Thr Pro Leu Thr
 20 25 30

His Asp Gly Gln Pro Lys Glu Met Pro Gln Ala Pro Val Leu Ile Ser
 35 40 45

Cys Ala Asp Gln Xaa
 50

<210> 215
 <211> 68
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE

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129

<222> (68)

<223> Xaa equals stop translation

<400> 215

Met	Cys	Thr	Gln	Ile	Leu	Val	Phe	Met	Leu	Leu	Ile	Lys	Cys	Ile	Phe
1				5					10					15	

Ser	Ile	Asn	Thr	His	Pro	Ile	Met	Pro	Tyr	Leu	Tyr	Met	Lys	Asn	Lys
		20					25						30		

Val	Thr	Met	Leu	Tyr	Cys	Tyr	Val	Leu	Lys	Phe	Lys	Ser	Leu	Phe	Glu
		35				40						45			

Lys	Pro	Ser	Asn	Trp	Cys	Phe	His	Tyr	Ile	Met	Ile	His	Leu	Asp	Lys
	50					55					60				

Thr	Pro	Asn	Xaa
65			

<210> 216

<211> 57

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (57)

<223> Xaa equals stop translation

<400> 216

Met	Leu	Phe	Val	Ser	Leu	Leu	Val	Met	Trp	Asn	Leu	Phe	Leu	Ser	Ser
1				5					10					15	

Asp	Phe	Leu	Phe	Leu	Trp	Ser	Val	Leu	Gly	Tyr	Tyr	Met	Lys	Val	Arg
		20					25						30		

Leu	Pro	Gln	Ser	Pro	Arg	Glu	Ala	His	Cys	Val	Leu	Leu	Ile	Asp	Leu
		35				40							45		

Lys	Met	Ile	Glu	Ser	Leu	Gly	Gly	Xaa
50						55		

<210> 217

<211> 56

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (56)

<223> Xaa equals stop translation

<400> 217

Met	Glu	Gln	Leu	Leu	Ala	Ala	Val	Val	Phe	Phe	Ser	Ile	Phe	Phe	Leu
1				5					10					15	

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130

Asn Leu Leu Ala Leu Lys Met Asn Lys Val Tyr Arg Cys Ile Cys Leu
 20 25 30

Leu Phe Ser Lys Asn Met His Thr Asn Val Cys Phe Tyr Lys Ser Asn
 35 40 45

Thr His Val Ile Ile Cys Met Xaa
 50 55

<210> 218
 <211> 58
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (58)
 <223> Xaa equals stop translation

<400> 218
 Met Cys Trp Lys Pro Lys Cys Ile Leu Leu Leu Ser Phe Val Phe Gln
 1 5 10 15

Cys Val Ala Ser Ser Thr Phe Asp Pro Leu Gly Ser Glu Arg Pro Trp
 20 25 30

Ser Gln Pro Gln Cys Pro Ile Ser Phe Pro Leu Leu Ile Thr Gly Cys
 35 40 45

Cys Trp Phe Ser Met Ser Arg Val Ser Xaa
 50 55

<210> 219
 <211> 59
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (59)
 <223> Xaa equals stop translation

<400> 219
 Met Arg Thr Phe Leu Thr Phe Val Ile Leu Lys Val Ile Leu Ile Phe
 1 5 10 15

Leu Ser Ser Cys Ala Ser Phe Thr Arg Asn Leu Leu Thr Trp Pro Asn
 20 25 30

Asp Val Ser Thr Glu Gln Phe Glu Thr Arg Pro Phe Gly Ser Glu Leu
 35 40 45

Leu Gln Thr Val Ile Asn Val Ser Arg Thr Xaa
 50 55

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<210> 220
<211> 45
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (45)
<223> Xaa equals stop translation

<400> 220
Met Arg Phe Phe Phe Gln Ala Tyr Ser Gln Ile Cys Val Gln Asn Phe
1 5 10 15
Leu Thr Phe Leu Leu Cys Ile Ile Ile Glu Phe Ile Ala Ala Asp Phe
20 25 30
Tyr Asn Asp Ser Cys Cys His Val Ser Leu Asn Asn Xaa
35 40 45

<210> 221
<211> 45
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (45)
<223> Xaa equals stop translation

<400> 221
Met Ile Leu Phe Asp Leu Thr Phe Phe Leu Phe Ala Pro Arg Ile Leu
1 5 10 15
Ala Ser Gly Ala Cys Ser Cys Ser Ile Tyr Pro Lys Ile Thr Leu Pro
20 25 30
Thr Lys Tyr Phe Ala Phe Ile Ile Xaa Thr Ser Phe Xaa
35 40 45

<210> 222
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)

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132

<223> Xaa equals stop translation

<400> 222

Met	Asp	Gly	Leu	Ile	Met	Cys	Leu	Ile	Ile	Phe	Gln	Ile	Val	Asn	Phe
1					5				10					15	

Trp	Leu	Pro	Cys	Ile	Ile	Leu	Leu	Gly	Ile	Leu	Asn	Pro	Thr	Tyr	Lys
			20					25					30		

Asn	Tyr	Val	Met	Val	Ser	Thr	Lys	Cys	Trp	Met	Lys	Arg	Thr	Tyr	Glu
		35					40					45			

His	Met	Ser	Xaa
			50

<210> 223

<211> 73

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (73)

<223> Xaa equals stop translation

<400> 223

Met	Thr	Phe	Leu	Phe	Phe	Phe	Leu	Phe	Ser	Arg	Ile	Leu	Cys	Ile	Lys
1				5					10					15	

Asn	Leu	Asp	Leu	Leu	Thr	Trp	Lys	Arg	Ser	Asn	Pro	Val	Ile	Ala	Lys
			20					25					30		

His	Leu	Tyr	Cys	Arg	Gly	His	Ile	Thr	Lys	Lys	Ser	Lys	Gly	Pro	Ala
		35					40					45			

Gln	Trp	Thr	Ile	Tyr	Phe	Ser	Asp	Val	Gln	Tyr	Lys	Ile	Ser	Leu	Pro
		50				55					60				

Leu	Lys	Thr	Leu	Glu	Ser	Pro	Phe	Xaa
	65					70		

<210> 224

<211> 71

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (71)

<223> Xaa equals stop translation

<400> 224

Met	Leu	Phe	Trp	Lys	Phe	Gly	Ser	Phe	Leu	Phe	Phe	Cys	Leu	Pro	Leu
1				5					10					15	

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133

Thr Leu Phe Cys Ile Leu Asn Glu Arg Gly Ile Met His Leu Glu Gly
 20 25 30

Gly Thr Leu Leu Asn Ser Leu Ser His Val Arg His Tyr Leu Arg Leu
 35 40 45

Arg Leu Ser Cys Phe Glu Lys Ile Pro Leu His Arg Ser Ile Phe Ile
 50 55 60

Phe Leu Leu Leu Leu Leu Xaa
 65 70

<210> 225

<211> 58

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (58)

<223> Xaa equals stop translation

<400> 225

Met Ala Gly Cys Cys Leu Lys Leu Phe Gly Val Leu Ser Leu Cys Phe
 1 5 10 15

Leu Cys Gly Leu Ile Ser Ile Glu Arg Val Ile Cys Asn Pro Val Ser
 20 25 30

Ala Asp Phe Gln Val Ser Thr Phe Cys Gln Arg His Cys Leu Leu Arg
 35 40 45

Ser Lys Val Met Phe Pro Ile Arg Gly Xaa
 50 55

<210> 226

<211> 59

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (59)

<223> Xaa equals stop translation

<400> 226

Met Arg Ile Ser Arg Cys Asn Ile Ser Leu Glu Ile Val Ser Pro Ser
 1 5 10 15

Ile Leu Leu Thr Phe Leu Asp Leu Ile Ile Leu Leu Trp Ala Leu Ala
 20 25 30

Ser Cys Tyr Arg Arg Phe Thr Ser Phe Pro Ala Leu Asn Leu Pro Asp
 35 40 45

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134

Val Asn Ser Thr Leu His Tyr Leu Gln Gln Xaa
 50 55

<210> 227
 <211> 43
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (43)
 <223> Xaa equals stop translation

<400> 227
 Met Val Ala Pro Leu His Leu Phe Ile Pro Phe Ser Trp Leu Val Arg
 1 5 10 15

Thr Ile Gly Gln Leu Leu Ser Pro Val Gly Lys Ala Leu Ser His Arg
 20 25 30

Ser Asn Gln Met Met Pro Arg Ser Trp Gly Xaa
 35 40

<210> 228
 <211> 41
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (41)
 <223> Xaa equals stop translation

<400> 228
 Met Arg Thr Ser Leu Phe Phe Phe Phe Phe Lys Asn Ile Leu Val Leu
 1 5 10 15

Cys Gly Thr Leu Leu Ile Ser Arg Ser Ser His Ser Gln Ser Ala Pro
 20 25 30

Arg Gly Cys Trp Trp Pro His Lys Xaa
 35 40

<210> 229
 <211> 42
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (42)
 <223> Xaa equals stop translation

<400> 229

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135

Met Leu Trp Lys Tyr Phe Leu Ser Leu Phe Leu Pro Trp Tyr Leu Tyr
 1 5 10 15

Cys Phe Phe Asn Asn Asn Ile Met Phe Tyr Ser Leu His Ser Val Pro
 20 25 30

Met Phe Ile Gln Pro Phe Leu Leu Trp Xaa
 35 40

<210> 230

<211> 165

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (165)

<223> Xaa equals stop translation

<400> 230

Met Ser Thr Arg Arg Leu Gly Val Ala Val Ala Val Leu Gly Gly Phe
 1 5 10 15

Leu Tyr Ala Val Gly Gly Ser Asp Gly Thr Ser Pro Leu Asn Thr Val
 20 25 30

Glu Arg Tyr Asn Pro Gln Glu Asn Arg Trp His Thr Ile Ala Pro Met
 35 40 45

Gly Thr Arg Arg Lys His Leu Gly Cys Ala Val Tyr Gln Asp Met Ile
 50 55 60

Tyr Ala Val Gly Gly Arg Asp Asp Thr Thr Glu Leu Ser Ser Ala Glu
 65 70 75 80

Arg Tyr Asn Pro Arg Thr Asn Gln Trp Ser Pro Val Val Ala Met Thr
 85 90 95

Ser Arg Arg Ser Gly Val Gly Leu Ala Val Val Asn Gly Gln Leu Met
 100 105 110

Ala Val Gly Gly Phe Asp Gly Thr Thr Tyr Leu Lys Thr Ile Glu Val
 115 120 125

Phe Asp Pro Asp Ala Asn Thr Trp Arg Leu Tyr Gly Gly Met Asn Tyr
 130 135 140

Arg Arg Leu Gly Gly Gly Val Gly Val Ile Lys Met Thr His Cys Glu
 145 150 155 160

Ser His Ile Trp Xaa
 165

<210> 231

<211> 52

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136

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals stop translation

<400> 231

Met	Ala	Cys	Leu	Ile	Arg	Phe	Pro	Ala	Ile	Gly	Ser	Leu	Pro	Tyr	Ser
1				5					10					15	

Thr	Trp	Pro	Phe	Phe	Phe	Phe	Ile	Phe	Leu	Phe	Phe	Ser	Cys	Leu	Thr
			20				25						30		

Phe	Ile	Pro	Phe	Ser	Pro	Leu	Ser	Ser	Phe	Cys	Glu	Pro	Tyr	Pro	Arg
		35					40					45			

Lys	Glu	Pro	Xaa
	50		

<210> 232

<211> 130

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (130)

<223> Xaa equals stop translation

<400> 232

Met	Phe	Leu	Leu	Asn	Phe	Arg	Tyr	Ile	Met	Arg	Phe	Phe	Phe	Trp	Pro
1				5					10					15	

Met	Leu	Gln	Ala	Lys	Leu	Met	Ser	Phe	His	Phe	Leu	Lys	Pro	Ile	Ile
			20					25					30		

Phe	Met	Asn	Ser	Leu	Ile	Leu	Cys	Leu	Lys	Gln	Ser	Cys	Ser	Cys	Glu
		35					40					45			

Val	Glu	Ile	Ser	Leu	Leu	Pro	Leu	Ser	Gln	Gln	Thr	His	Arg	Thr	Asp
	50					55					60				

Leu	Gly	Phe	Ser	His	Ser	Gly	Ser	Gln	Asn	Glu	Pro	Phe	Leu	Asn	Leu
65					70				75					80	

Asp	Lys	Arg	Ala	Ala	Glu	Ala	His	Cys	Ala	Val	Met	Val	Leu	Cys	Leu
			85					90						95	

Leu	Gly	Arg	Asp	Leu	Lys	Ala	Arg	Arg	Ser	Arg	Glu	Gly	Pro	Ala	Leu
		100					105						110		

Cys	Ser	Ser	Gln	Val	Val	Ile	Cys	Ile	Leu	Lys	Leu	Ala	Arg	Lys	Arg
			115				120					125			

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Phe Xaa
130

<210> 233
<211> 55
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (55)
<223> Xaa equals stop translation

<400> 233
Met Glu Phe Lys Leu Val Arg Lys Ile Gln Ile Ala Ile Leu Ile Phe
1 5 10 15
Tyr Leu Tyr Leu Val Ala Val Ala Phe Lys Asn Lys Phe Ser Tyr Lys
20 25 30
Ser Phe Gln Phe Phe Gly Leu Glu Ser Ile Phe Gln Asn Lys Lys Leu
35 40 45
Lys Lys Glu Tyr Leu Met Xaa
50 55

<210> 234
<211> 363
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (307)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (363)
<223> Xaa equals stop translation

<400> 234
Met Arg Thr Leu Phe Asn Leu Leu Trp Leu Ala Leu Ala Cys Ser Pro
1 5 10 15
Val His Thr Thr Leu Ser Lys Ser Asp Ala Lys Lys Ala Ala Ser Lys
20 25 30
Thr Leu Leu Glu Lys Ser Gln Phe Ser Asp Lys Pro Val Gln Asp Arg
35 40 45
Gly Leu Val Val Thr Asp Leu Lys Ala Glu Ser Val Val Leu Glu His
50 55 60
Arg Ser Tyr Cys Ser Ala Lys Ala Arg Asp Arg His Phe Ala Gly Asp

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65		70								75				80	
Val	Leu	Gly	Tyr	Val	Thr	Pro	Trp	Asn	Ser	His	Gly	Tyr	Asp	Val	Thr
				85					90					95	
Lys	Val	Phe	Gly	Ser	Lys	Phe	Thr	Gln	Ile	Ser	Pro	Val	Trp	Leu	Gln
		100						105					110		
Leu	Lys	Arg	Arg	Gly	Arg	Glu	Met	Phe	Glu	Val	Thr	Gly	Leu	His	Asp
		115					120					125			
Val	Asp	Gln	Gly	Trp	Met	Arg	Ala	Val	Arg	Lys	His	Ala	Lys	Gly	Leu
	130					135					140				
His	Ile	Val	Pro	Arg	Leu	Leu	Phe	Glu	Asp	Trp	Thr	Tyr	Asp	Asp	Phe
145					150					155					160
Arg	Asn	Val	Leu	Asp	Ser	Glu	Asp	Glu	Ile	Glu	Glu	Leu	Ser	Lys	Thr
				165					170						175
Val	Val	Gln	Val	Ala	Lys	Asn	Gln	His	Phe	Asp	Gly	Phe	Val	Val	Glu
			180					185					190		
Val	Trp	Asn	Gln	Leu	Leu	Ser	Gln	Lys	Arg	Val	Thr	Asp	Gln	Leu	Gly
		195					200					205			
Met	Phe	Thr	His	Lys	Glu	Phe	Glu	Gln	Leu	Ala	Pro	Val	Leu	Asp	Gly
	210					215					220				
Phe	Ser	Leu	Met	Thr	Tyr	Asp	Tyr	Ser	Thr	Ala	His	Gln	Pro	Gly	Pro
225					230					235					240
Asn	Ala	Pro	Leu	Ser	Trp	Val	Arg	Ala	Cys	Val	Gln	Val	Leu	Asp	Pro
				245					250					255	
Lys	Ser	Lys	Trp	Arg	Ser	Lys	Ile	Leu	Leu	Gly	Leu	Asn	Phe	Tyr	Gly
			260					265					270		
Met	Asp	Tyr	Ala	Thr	Ser	Lys	Asp	Ala	Arg	Glu	Pro	Val	Val	Gly	Ala
		275					280					285			
Arg	Tyr	Ile	Gln	Thr	Leu	Lys	Asp	His	Arg	Pro	Arg	Met	Val	Trp	Asp
	290					295					300				
Ser	Gln	Xaa	Ser	Glu	His	Phe	Phe	Glu	Tyr	Lys	Lys	Ser	Arg	Ser	Gly
305					310					315					320
Arg	His	Val	Val	Phe	Tyr	Pro	Thr	Leu	Lys	Ser	Leu	Gln	Val	Arg	Leu
				325					330					335	
Glu	Leu	Ala	Arg	Glu	Leu	Gly	Val	Gly	Val	Ser	Ile	Trp	Glu	Leu	Gly
			340					345					350		
Gln	Gly	Leu	Asp	Tyr	Phe	Tyr	Asp	Leu	Leu	Xaa					
		355					360								

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139

<210> 235
 <211> 29
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (29)
 <223> Xaa equals stop translation

<400> 235
 Met Cys Met Cys Val Leu Leu Cys Val Phe Leu Ile Cys Lys Tyr Ser
 1 5 10 15
 Lys Ser Phe Leu Ile Leu Arg Leu Lys Phe Ser Cys Xaa
 20 25

<210> 236
 <211> 67
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (67)
 <223> Xaa equals stop translation

<400> 236
 Met Gly Asn Ala Cys Ile Pro Leu Lys Arg Ile Ala Tyr Phe Leu Cys
 1 5 10 15
 Leu Leu Ser Ala Leu Leu Leu Thr Glu Gly Lys Lys Pro Ala Asn Gln
 20 25 30
 Asn Ala Leu Pro Cys Val Leu Val Pro Lys Ile Met Leu Tyr Val Arg
 35 40 45
 Met Pro Asp Pro Phe His Ala Pro Phe Leu Leu Met Leu Ser His Tyr
 50 55 60
 Pro Leu Xaa
 65

<210> 237
 <211> 114
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (114)
 <223> Xaa equals stop translation

<400> 237
 Met Ile Leu Ser Leu Leu Phe Ser Leu Gly Gly Pro Leu Gly Trp Gly

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140
 1 5 10 15
 Leu Leu Gly Ala Trp Ala Gln Ala Ser Ser Thr Ser Leu Ser Asp Leu
 20 25 30
 Gln Ser Ser Arg Thr Pro Gly Val Trp Lys Ala Glu Ala Glu Asp Thr
 35 40 45
 Ser Lys Asp Pro Val Gly Arg Asn Trp Cys Pro Tyr Pro Met Ser Lys
 50 55 60
 Leu Val Thr Leu Leu Ala Leu Cys Lys Thr Glu Lys Phe Leu Ile His
 65 70 75 80
 Ser Gln Gln Pro Cys Pro Gln Glu Leu Gln Thr Ala Arg Lys Ser Lys
 85 90 95
 Ser Cys Thr Ala Trp Pro Thr Ser Gln Cys Thr Arg Ser Ser Arg Arg
 100 105 110

Cys Xaa

<210> 238
 <211> 106
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (106)
 <223> Xaa equals stop translation

<400> 238
 Met Ala Ile His Lys Ala Leu Val Met Cys Leu Gly Leu Pro Leu Phe
 1 5 10 15
 Leu Phe Pro Gly Ala Trp Ala Gln Gly His Val Pro Pro Gly Cys Ser
 20 25 30
 Gln Gly Leu Asn Pro Leu Tyr Tyr Asn Leu Cys Asp Arg Ser Gly Ala
 35 40 45
 Trp Gly Ile Val Leu Glu Ala Val Ala Gly Ala Gly Ile Val Thr Thr
 50 55 60
 Phe Val Leu Thr Ile Ile Leu Val Ala Ser Leu Pro Phe Val Gln Asp
 65 70 75 80
 Thr Lys Lys Arg Ser Leu Leu Gly Thr Gln Leu Arg Gly Arg Cys His
 85 90 95
 His Thr Ala Gly Thr Met Gly Ser Cys Xaa
 100 105

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<210> 239
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 239

Gly Leu Gly Pro Ala Gln Val Ala Leu Ser Leu Gln Gly Pro Ala
 1 5 10 15

<210> 240
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 240

Ser Ser Trp Met Ala Gly Thr Gln Pro Arg Thr Ser Trp Trp Glu Met
 1 5 10 15

Ser Ser Ala Lys Pro Cys Pro Thr Gly Thr Leu Arg Ser Asn Thr Ser
 20 25 30

Ser His Pro Gln Cys Thr Gly Pro Pro Thr Thr His Pro Met Leu Val
 35 40 45

Gly Glu Asp Met Ser Cys Pro Glu Pro Gln Cys Gly Ala Ser Arg Leu
 50 55 60

Ser Trp Lys Met Leu Asn Ser Ser Pro Leu Met Met Ser Leu Trp Val
 65 70 75 80

Cys Ala

<210> 241
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 241

Gln Pro Arg Thr Ser Trp Trp Glu Met Ser Ser Ala Lys Pro Cys Pro
 1 5 10 15

Thr Gly Thr Leu Arg Ser Asn
 20

<210> 242
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 242

Met Ser Cys Pro Glu Pro Gln Cys Gly Ala Ser Arg Leu Ser Trp Lys
 1 5 10 15

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142

Met Leu Asn Ser Ser Pro Leu
20

<210> 243
<211> 98
<212> PRT
<213> Homo sapiens

<400> 243
Trp Val Ala Leu Tyr Ile Glu Gly Gly Met Lys Tyr Leu Thr Leu Val
1 5 10 15
Phe Leu Leu Gly Arg Ala Trp Arg Met Thr Ser Pro Thr Arg Arg Ser
20 25 30
Trp Ala Gly Ser Gln Pro Ser Arg Asn Ser Asn Thr Leu Gly Thr Trp
35 40 45
Thr Lys Thr Ser Ser Ser Pro Phe Ser Met Lys Trp Ala Trp Gly Gln
50 55 60
Ala Ala Thr Thr Gln Arg Cys Arg Cys Ser Ser Leu Ser Val Arg Leu
65 70 75 80
Lys Lys Ser Ser Val Lys Ser His Trp Arg Met Ser Ser Asn Ser Leu
85 90 95
Leu Ser

<210> 244
<211> 20
<212> PRT
<213> Homo sapiens

<400> 244
Gly Gly Met Lys Tyr Leu Thr Leu Val Phe Leu Leu Gly Arg Ala Trp
1 5 10 15
Arg Met Thr Ser
20

<210> 245
<211> 25
<212> PRT
<213> Homo sapiens

<400> 245
Ser Gln Pro Ser Arg Asn Ser Asn Thr Leu Gly Thr Trp Thr Lys Thr
1 5 10 15
Ser Ser Ser Pro Phe Ser Met Lys Trp
20 25

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<210> 246
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 246
 Thr Thr Gln Arg Cys Arg Cys Ser Ser Leu Ser Val Arg Leu Lys Lys
 1 5 10 15
 Ser Ser Val Lys Ser His Trp Arg Met Ser
 20 25

<210> 247
 <211> 223
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (13)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (14)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (15)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
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 <222> (27)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
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 <222> (108)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (113)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (117)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (121)

SUBSTITUTE SHEET (RULE 26)

144

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (122)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (125)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (129)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (130)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 247

Ala	Ser	Thr	Leu	Ala	Gln	Thr	Thr	Gly	Thr	Cys	Lys	Xaa	Xaa	Xaa	Ser
1				5					10					15	

Ser	Arg	Arg	Ala	Arg	Ser	Arg	Thr	Gln	Arg	Xaa	Phe	Gln	Leu	Arg	Pro
			20					25					30		

Asp	Lys	Arg	Ser	Ala	Pro	Ser	Leu	Leu	Gln	Phe	Ile	Gln	Ala	Gln	Glu
		35					40					45			

Glu	Leu	Ser	Lys	Glu	Asn	Thr	Gly	Arg	Gln	Leu	Ala	Ala	Arg	Glu	Ala
	50					55					60				

Val	Leu	Ala	Leu	Glu	Gly	Ser	Thr	Gln	Leu	Thr	Gly	Pro	Val	Thr	Gln
65					70					75					80

Val	Ala	Ala	Ser	Lys	Thr	His	Cys	Ser	Gly	Met	Ala	Leu	Thr	Ala	Ser
				85					90					95	

Pro	Val	Pro	Val	Leu	Gly	Ala	Ala	Pro	Ala	Lys	Xaa	Pro	Thr	Gln	Asn
			100					105						110	

Xaa	Pro	Gly	Gln	Xaa	Gly	Arg	Ala	Xaa	Xaa	Lys	Val	Xaa	Thr	Ser	Trp
		115				120						125			

Xaa	Xaa	Val	Ala	Thr	Lys	Val	Leu	His	Gly	Leu	Glu	Val	Ser	Thr	His
	130					135					140				

Leu	Gly	Lys	Arg	Lys	Leu	Ser	Gly	Arg	Ser	Trp	Leu	Pro	Gly	Pro	Ala
145					150					155					160

Leu	His	Ala	Thr	Pro	Ser	Gln	Ser	His	Thr	Gln	Thr	Gly	Ser	Gln	Ile
				165					170					175	

Val	His	Pro	Pro	Gln	Gly	Glu	Val	Arg	Glu	Val	Gly	Arg	Gly	Arg	Gly
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

SUBSTITUTE SHEET (RULE 26)

SUBSTITUTE SHEET (RULE 26)

146

Cys Val Pro Thr Asn Gly Gln Pro Leu Arg Ser Cys Ser Leu Ser Lys
 100 105 110

Leu Arg Arg Ser Phe Leu Lys Arg Thr Gln Gly Asp Ser Trp Leu Pro
 115 120 125

Glu Lys Gln Ser Trp Leu Trp Lys Ala Pro Pro Ser
 130 135 140

<210> 249
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 249
 Ser His Gln Ser His Leu Ile Asn Pro Ala Ser Ser Ala Lys Gly Ser
 1 5 10 15

Trp Ala Gln Leu Lys Ala Gln Pro Pro Ala His Val Leu Gly Gly Thr
 20 25 30

Gly Gln Glu Gly Pro Pro Pro Thr Ala Asp Gln Pro Glu Ser Pro Gly
 35 40 45

Trp Asp Pro Ser Ser Phe Thr Asn Gly Ser Ser Gly Pro Arg Ala Leu
 50 55 60

Pro Thr Ser Val His Pro Thr Leu Gln Gln Gly Ala Pro Cys Arg Arg
 65 70 75 80

Asn Trp Ala Pro Cys Arg Gly Leu Val Glu Thr Arg Met Leu Arg Arg
 85 90 95

Gln Leu Pro His Gly Thr Ser Lys Arg Asp Leu Gly Trp Ala Ser Leu
 100 105 110

Gln Arg Gly Ser Pro Gln Glu Thr Pro Gln
 115 120

<210> 250
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 250
 Arg Pro Asp Lys Arg Ser Ala Pro Ser Leu Leu Gln Phe Ile Gln Ala
 1 5 10 15

Gln Glu Glu Leu Ser Lys Glu Asn Thr Gly Arg Gln Leu Ala Ala Arg
 20 25 30

Glu Ala Val
 35

SUBSTITUTE SHEET (RULE 26)

147

<210> 251
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 251
 Ala Thr Pro Ser Gln Ser His Thr Gln Thr Gly Ser Gln Ile Val His
 1 5 10 15

Pro Pro Gln Gly Glu Val Arg Glu Val Gly Arg Gly Arg Gly Gln Pro
 20 25 30

Pro

<210> 252
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 252
 Gln Asp Ser Gln His Ser Pro Pro His Val Arg Ala His Leu Leu Ile
 1 5 10 15

Ser Pro Leu Pro Ala Phe Pro Ser Met Gly Gly Pro Ala
 20 25

<210> 253
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 253
 Asp Ser Phe Asn Cys Val Pro Thr Asn Gly Gln Pro Leu Arg Ser Cys
 1 5 10 15

Ser Leu Ser Lys Leu Arg Arg Ser Phe Leu Lys Arg
 20 25

<210> 254
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 254
 Lys Gly Ser Trp Ala Gln Leu Lys Ala Gln Pro Pro Ala His Val Leu
 1 5 10 15

Gly Gly Thr Gly Gln Glu Gly Pro Pro
 20 25

<210> 255

SUBSTITUTE SHEET (RULE 26)

148

<211> 26

<212> PRT

<213> Homo sapiens

<400> 255

Ala Pro Ser Leu Leu Gln Phe Ile Gln Ala Gln Glu Glu Leu Ser Lys
1 5 10 15

Glu Asn Thr Gly Arg Gln Leu Ala Ala Arg
20 25

<210> 256

<211> 6

<212> PRT

<213> Homo sapiens

<400> 256

Lys Pro Ser His Gln Pro
1 5

<210> 257

<211> 21

<212> PRT

<213> Homo sapiens

<400> 257

Cys Ser Tyr Arg Pro Gln Phe Pro Val Asp Pro Arg Val Arg Ala Thr
1 5 10 15

Cys Ile Val Phe Asn
20

<210> 258

<211> 128

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (60)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 258

Gly Thr Glu Asn Leu Leu Ala Pro Glu Arg Thr Ile Leu Ser Arg Ala

SUBSTITUTE SHEET (RULE 26)

149
 1 5 10 15
 Gln Met Gly Lys Cys Met Ala Thr Pro Ala Pro Cys Val Arg Ser Ser
 20 25 30
 Ser Lys Gln Lys Lys Lys Lys Arg Lys Arg Arg Lys Val Xaa Gln Glu
 35 40 45
 Thr Lys Asp Asn Leu Arg Val Gln Leu Pro Leu Xaa Ser Cys Val Val
 50 55 60
 Asn Xaa Ala Asn Pro Gly Lys Thr Asp Gly Phe Phe Ala Pro Glu Arg
 65 70 75 80
 Met Thr Pro Ser Arg Ala Gln Met Glu Lys Cys Met Ala Thr Pro Ala
 85 90 95
 Pro Cys Val Arg Pro Ser Phe Asn Lys Lys Lys Glu Gln Glu Gln Arg
 100 105 110
 Leu Lys Glu Lys Leu Gln Arg Lys Ser Ala Val Asn Phe Gly Thr Lys
 115 120 125

<210> 259
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 259
 Leu Leu Ala Pro Glu Arg Thr Ile Leu Ser Arg Ala Gln Met Gly Lys
 1 5 10 15
 Cys Met Ala Thr Pro Ala Pro Cys Val Arg
 20 25

<210> 260
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 260
 Pro Gly Lys Thr Asp Gly Phe Phe Ala Pro Glu Arg Met Thr Pro Ser
 1 5 10 15
 Arg Ala Gln Met Glu Lys Cys Met
 20

<210> 261
 <211> 17
 <212> PRT
 <213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

150

<400> 261

Glu Gln Arg Leu Lys Glu Lys Leu Gln Arg Lys Ser Ala Val Asn Phe
 1 5 10 15

Gly

<210> 262

<211> 186

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 262

Lys Thr Leu Leu Glu Asn Phe Ser Thr Gln Gly Thr Phe Val Ala Met
 1 5 10 15

His Pro Ala Val Arg Ala Thr Asp Trp Ile Thr Leu Pro Cys Thr Lys
 20 25 30

Lys Pro Ser Ile Ser His Leu Phe Phe Xaa Phe Leu Ala Lys Ile Leu
 35 40 45

Phe Ser Ile Ser Ser Asn Ser Ser Phe Thr Leu Ser Leu Gly Ile Phe
 50 55 60

Ser Phe Phe Xaa Xaa Gln Leu Ser Thr His Cys Thr Leu Ile Ala Met
 65 70 75 80

Arg Leu Pro Ile Arg Thr Lys Asn Arg Ile Ile Phe Pro Cys Ala Ser
 85 90 95

Lys Ser Ser Ile Ser Asn Lys Gly Pro Lys Ser Thr Ala Tyr Ile Leu
 100 105 110

Leu Trp Ile Thr Ala Leu Thr Phe Pro Phe Thr Phe Tyr Thr Asn Leu
 115 120 125

Gly Pro Gly Phe Arg Ile Leu Ser Thr Gln Cys Thr Ser Val Val Ile
 130 135 140

SUBSTITUTE SHEET (RULE 26)

151

Cys Phe Pro Ile Cys Ala Thr Asn Ser Phe Ile Ile Ile Arg Thr Asp
 145 150 155 160

Lys Ile Pro Ile Ser Phe Ser Phe Phe Lys Ile Ile Thr Ile Gln Leu
 165 170 175

Cys Trp Gly Ser Ser Leu Gly Ser Ser Cys
 180 185

<210> 263

<211> 22

<212> PRT

<213> Homo sapiens

<400> 263

Met His Pro Ala Val Arg Ala Thr Asp Trp Ile Thr Leu Pro Cys Thr
 1 5 10 15

Lys Lys Pro Ser Ile Ser
 20

<210> 264

<211> 17

<212> PRT

<213> Homo sapiens

<400> 264

Leu Ile Ala Met Arg Leu Pro Ile Arg Thr Lys Asn Arg Ile Ile Phe
 1 5 10 15

Pro

<210> 265

<211> 26

<212> PRT

<213> Homo sapiens

<400> 265

Ser Ser Ile Ser Asn Lys Gly Pro Lys Ser Thr Ala Tyr Ile Leu Leu
 1 5 10 15

Trp Ile Thr Ala Leu Thr Phe Pro Phe Thr
 20 25

<210> 266

<211> 23

<212> PRT

<213> Homo sapiens

<400> 266

Ile Ile Ile Arg Thr Asp Lys Ile Pro Ile Ser Phe Ser Phe Phe Lys
 1 5 10 15

SUBSTITUTE SHEET (RULE 26)

Ile Ile Thr Ile Gln Leu Cys
20

<210> 267
<211> 165
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (147)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (153)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 267
Asn Asp Gly Gln Cys Leu Ala Tyr Asn Thr Thr His Tyr Arg Glu Arg
1 5 10 15

Ala Met Thr Ser His Ala Arg Val Ser Leu Gly Pro Ser Arg Asp Pro
20 25 30

Leu Glu Arg Pro Pro Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe
35 40 45

Lys Phe Glu His Thr Gly Thr His Gly Thr Leu Val Ser Met His Phe
50 55 60

Ala Ile Trp Ala Thr Asp Arg Ile Met Leu Pro Gly Ala Tyr Lys Cys
65 70 75 80

Ser Ile Pro His Leu Val Pro Lys Phe Thr Ala Asp Phe Leu Cys Ser
85 90 95

Phe Ser Phe Ser Leu Cys Ser Cys Ser Phe Phe Leu Leu Lys Glu Gly
100 105 110

Leu Thr His Gly Ala Gly Val Ala Met His Phe Ser Ile Trp Ala Leu
115 120 125

Asp Gly Val Ile Leu Ser Gly Ala Lys Lys Pro Ser Val Phe Pro Gly
130 135 140

Phe Ala Xaa Phe Thr Thr Gln Leu Xaa Lys Gly Ser Cys Thr Leu Arg
145 150 155 160

Leu Ser Phe Val Ser
165

<210> 268
<211> 22

SUBSTITUTE SHEET (RULE 26)

153

<212> PRT

<213> Homo sapiens

<400> 268

Cys Leu Ala Tyr Asn Thr Thr His Tyr Arg Glu Arg Ala Met Thr Ser
1 5 10 15

His Ala Arg Val Ser Leu
20

<210> 269

<211> 31

<212> PRT

<213> Homo sapiens

<400> 269

Gly Thr Leu Val Ser Met His Phe Ala Ile Trp Ala Thr Asp Arg Ile
1 5 10 15

Met Leu Pro Gly Ala Tyr Lys Cys Ser Ile Pro His Leu Val Pro
20 25 30

<210> 270

<211> 24

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 270

Gly Val Ile Leu Ser Gly Ala Lys Lys Pro Ser Val Phe Pro Gly Phe
1 5 10 15

Ala Xaa Phe Thr Thr Gln Leu Xaa
20

<210> 271

<211> 141

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

SUBSTITUTE SHEET (RULE 26)

<220>
 <221> SITE
 <222> (38)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (44)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (57)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (58)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 271
 Lys Lys Ala Ser His Met Glu Gln Val Leu Pro Cys Ile Phe Pro Ser
 1 5 10 15
 Gly Pro Trp Met Gly Ser Phe Ser Leu Xaa Gln Lys Ser Arg Pro Phe
 20 25 30
 Phe Leu Asp Leu Arg Xaa Ser Leu His Asn Ser Xaa Lys Glu Ala Val
 35 40 45
 Leu Leu Asp Cys Leu Leu Phe Leu Xaa Xaa Pro Ser Phe Phe Phe Phe
 50 55 60
 Ser Ser Ser Ser Ala Trp Lys Lys Thr Ser His Met Glu Gln Val Leu
 65 70 75 80
 Pro Cys Thr Phe Pro Ser Gly Pro Trp Ile Gly Leu Phe Ser Leu Val
 85 90 95
 Gln Ala Ser Phe Pro Phe Leu Thr Ser Phe Arg Tyr Ser Leu Gln Ser
 100 105 110
 Ser Ala Tyr Glu Val Ala Phe Pro Asp Ser Leu Leu Phe Leu Ala Arg
 115 120 125
 Ala Ser Ala Phe Phe Phe Ser Ser Phe Ser Ala Trp Lys
 130 135 140

 <210> 272
 <211> 28
 <212> PRT
 <213> Homo sapiens

 <220>
 <221> SITE
 <222> (15)

SUBSTITUTE SHEET (RULE 26)

155

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 272

Cys	Ile	Phe	Pro	Ser	Gly	Pro	Trp	Met	Gly	Ser	Phe	Ser	Leu	Xaa	Gln
1				5				10					15		

Lys	Ser	Arg	Pro	Phe	Phe	Leu	Asp	Leu	Arg	Xaa	Ser
			20					25			

<210> 273

<211> 28

<212> PRT

<213> Homo sapiens

<400> 273

Trp	Ile	Gly	Leu	Phe	Ser	Leu	Val	Gln	Ala	Ser	Phe	Pro	Phe	Leu	Thr
1				5				10						15	

Ser	Phe	Arg	Tyr	Ser	Leu	Gln	Ser	Ser	Ala	Tyr	Glu
			20				25				

<210> 274

<211> 79

<212> PRT

<213> Homo sapiens

<400> 274

Asn	Ser	Ala	Val	Asn	Ile	Lys	Ile	Arg	Gln	Arg	Met	Glu	Tyr	Phe	Ser
1				5				10						15	

Val	Pro	Glu	Lys	Met	Thr	Leu	Phe	Val	Val	Gln	Met	Gly	Lys	Cys	Met
			20					25					30		

Ala	Thr	Cys	Val	Pro	Cys	Val	Lys	Pro	Thr	Ser	Lys	Gln	Lys	Met	Lys
			35				40					45			

Lys	Arg	Lys	Arg	Leu	Lys	His	Glu	Leu	Glu	Thr	Lys	Glu	Asn	Leu	Glu
			50			55					60				

Lys	Gln	Pro	His	Met	Gln	Ser	Phe	Ala	Val	Asn	Ile	Glu	Ser	Leu
65					70					75				

<210> 275

<211> 23

<212> PRT

<213> Homo sapiens

<400> 275

Ile	Lys	Ile	Arg	Gln	Arg	Met	Glu	Tyr	Phe	Ser	Val	Pro	Glu	Lys	Met
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

SUBSTITUTE SHEET (RULE 26)

156
 1 5 10 15
 Thr Leu Phe Val Val Gln Met
 20

<210> 276
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 276
 Val Lys Pro Thr Ser Lys Gln Lys Met Lys Lys Arg Lys Arg Leu Lys
 1 5 10 15
 His Glu Leu Glu Thr Lys Glu Asn Leu
 20 25

<210> 277
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 277
 Pro Arg Val Arg Gly Thr Val Val Arg Leu Arg Gln His Arg Pro Ser
 1 5 10 15
 Ala Tyr Ile Leu Val Ser Thr Val Leu Thr Leu Met Val Pro Trp His
 20 25 30
 Ser Leu Asp Pro Asp Ser Ala Leu Ala Asp Ala Phe Tyr Gln Arg Gly
 35 40 45
 Tyr Arg Trp Ala Gly Phe Ile Val Ala Ala Gly Ser Ile Cys Ala
 50 55 60

<210> 278
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 278
 Thr Val Val Arg Leu Arg Gln His Arg Pro Ser Ala Tyr Ile Leu Val
 1 5 10 15
 Ser Thr Val Leu Thr Leu Met Val Pro
 20 25

<210> 279
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 279

SUBSTITUTE SHEET (RULE 26)

157

Trp His Ser Leu Asp Pro Asp Ser Ala Leu Ala Asp Ala Phe Tyr Gln
 1 5 10 15

Arg Gly Tyr Arg Trp Ala Gly Phe Ile Val
 20 25

<210> 280

<211> 101

<212> PRT

<213> Homo sapiens

<400> 280

Thr Pro Ser Cys Ser Ala Ser Ser Ser Pro Cys His Ala Leu Ser Met
 1 5 10 15

Pro Trp Pro Pro Met Gly Ser Ser Ser Arg Cys Leu Pro Met Cys Thr
 20 25 30

Pro Gly His Arg Cys Leu Trp Arg Ala Pro Trp Arg Ser Gly Ser Ser
 35 40 45

Arg Pro Ser Trp His Cys Cys Trp Thr Trp Ser Arg Trp Phe Ser Ser
 50 55 60

Cys Pro Leu Ala His Ser Trp Pro Thr His Ser Trp Pro Pro Val Ser
 65 70 75 80

Leu Cys Cys Ala Ser Arg Ser Leu Pro Arg Pro Ala Pro Gln Ala Gln
 85 90 95

Pro Ala Leu Ala Pro
 100

<210> 281

<211> 24

<212> PRT

<213> Homo sapiens

<400> 281

Leu Ser Met Pro Trp Pro Pro Met Gly Ser Ser Ser Arg Cys Leu Pro
 1 5 10 15

Met Cys Thr Pro Gly His Arg Cys
 20

<210> 282

<211> 27

<212> PRT

<213> Homo sapiens

<400> 282

Ala Pro Trp Arg Ser Gly Ser Ser Arg Pro Ser Trp His Cys Cys Trp
 1 5 10 15

SUBSTITUTE SHEET (RULE 26)

158

Thr Trp Ser Arg Trp Phe Ser Ser Cys Pro Leu
 20 25

<210> 283

<211> 22

<212> PRT

<213> Homo sapiens

<400> 283

Thr His Ser Trp Pro Pro Val Ser Leu Cys Cys Ala Ser Arg Ser Leu
 1 5 10 15

Pro Arg Pro Ala Pro Gln
 20

<210> 284

<211> 60

<212> PRT

<213> Homo sapiens

<400> 284

Ala Tyr Ile Leu Val Ser Thr Val Leu Thr Leu Met Val Pro Trp His
 1 5 10 15

Ser Leu Asp Pro Asp Ser Ala Leu Ala Asp Ala Phe Tyr Gln Arg Gly
 20 25 30

Tyr Arg Trp Ala Gly Phe Ile Val Ala Ala Gly Ser Ile Cys Ala Met
 35 40 45

Asn Thr Val Leu Leu Ser Leu Leu Phe Ser Leu Pro
 50 55 60

<210> 285

<211> 31

<212> PRT

<213> Homo sapiens

<400> 285

Pro Trp His Ser Leu Asp Pro Asp Ser Ala Leu Ala Asp Ala Phe Tyr
 1 5 10 15

Gln Arg Gly Tyr Arg Trp Ala Gly Phe Ile Val Ala Ala Gly Ser
 20 25 30

<210> 286

<211> 27

<212> PRT

<213> Homo sapiens

<400> 286

Arg Ile Val Tyr Ala Met Ala Ala Asp Gly Leu Phe Phe Gln Val Phe
 1 5 10 15

SUBSTITUTE SHEET (RULE 26)

159

Ala His Val His Pro Arg Thr Gln Val Pro Val
 20 25

<210> 287
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 287
 Asp Leu Glu Ser Leu Val Gln Phe Leu Ser Leu Gly Thr Leu Leu Ala
 1 5 10 15

<210> 288
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 288
 Tyr Thr Phe Val Ala Thr Ser Ile Ile Val Leu Arg Phe Gln Lys
 1 5 10 15

<210> 289
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 289
 Leu Thr Lys Gln Gln Ser Ser Phe Ser Asp His Leu Gln Leu Val Gly
 1 5 10 15

Thr Val His Ala Ser Val Pro Glu Pro Gly Glu Leu Lys Pro Ala
 20 25 30

<210> 290
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 290
 Leu Arg Pro Tyr Leu Gly Phe Leu Asp Gly Tyr Ser Pro Gly Ala Val
 1 5 10 15

Val Thr Trp Ala Leu Gly Val Met Leu Ala Ser Ala Ile Thr Ile Gly
 20 25 30

Cys Val Leu Val Phe Gly Asn Ser Thr Leu His Leu Pro His Trp Gly
 35 40 45

Tyr Ile

SUBSTITUTE SHEET (RULE 26)

160

50

<210> 291
<211> 27
<212> PRT
<213> Homo sapiens

<400> 291
Pro Gly Ala Val Val Thr Trp Ala Leu Gly Val Met Leu Ala Ser Ala
1 5 10 15

Ile Thr Ile Gly Cys Val Leu Val Phe Gly Asn
20 25

<210> 292
<211> 53
<212> PRT
<213> Homo sapiens

<400> 292
Gly Ala His Gln Gln Gln Tyr Arg Glu Asp Leu Phe Gln Ile Pro Met
1 5 10 15

Val Pro Leu Ile Pro Ala Leu Ser Ile Val Leu Asn Ile Cys Leu Met
20 25 30

Leu Lys Leu Ser Tyr Leu Thr Trp Val Arg Phe Ser Ile Trp Leu Leu
35 40 45

Met Gly Leu Ala Val
50

<210> 293
<211> 26
<212> PRT
<213> Homo sapiens

<400> 293
Met Val Pro Leu Ile Pro Ala Leu Ser Ile Val Leu Asn Ile Cys Leu
1 5 10 15

Met Leu Lys Leu Ser Tyr Leu Thr Trp Val
20 25

<210> 294
<211> 29
<212> PRT
<213> Homo sapiens

<400> 294
Tyr Phe Gly Tyr Gly Ile Arg His Ser Lys Glu Asn Gln Arg Glu Leu
1 5 10 15

SUBSTITUTE SHEET (RULE 26)

161

Pro Gly Leu Asn Ser Thr His Tyr Val Val Phe Pro Arg
 20 25

<210> 295

<211> 23

<212> PRT

<213> Homo sapiens

<400> 295

Phe Pro Pro Ser Pro Ala Pro Pro His Ser Leu Pro Leu Arg Ser Trp
 1 5 10 15

Leu Trp Ser Arg Gln Met Gly
 20

<210> 296

<211> 148

<212> PRT

<213> Homo sapiens

<400> 296

Gly Thr Ser Phe Arg Gly Met Ile Ser Thr Gln Pro Gly Ser Thr Pro
 1 5 10 15

Leu Ala Ser Phe Lys Ile Leu Ala Leu Glu Ser Ala Asp Gly His Gly
 20 25 30

Gly Cys Ser Ala Gly Asn Asp Ile Gly Pro Tyr Gly Glu Arg Asp Asp
 35 40 45

Gln Gln Val Phe Ile Gln Lys Val Val Pro Ser Ala Ser Gln Leu Phe
 50 55 60

Val Arg Leu Ser Ser Thr Gly Gln Arg Val Cys Ser Val Arg Ser Val
 65 70 75 80

Asp Gly Ser Pro Thr Thr Ala Phe Thr Val Leu Glu Cys Glu Gly Ser
 85 90 95

Pro Ala Ala Arg Leu Ser Ala Pro Ala Leu Pro Ala His Trp Pro Gly
 100 105 110

Gln Arg Gln Leu Gly His Val Gly Pro Asn His Arg His Gly Arg Pro
 115 120 125

Arg Pro Gly Pro Cys Arg Trp Pro Asp Gly Ala Arg Ala Asp Gly Thr
 130 135 140

Ala Gly Thr Leu
 145

<210> 297

<211> 29

<212> PRT

SUBSTITUTE SHEET (RULE 26)

162

<213> Homo sapiens

<400> 297

Pro Gly Ser Thr Pro Leu Ala Ser Phe Lys Ile Leu Ala Leu Glu Ser
1 5 10 15

Ala Asp Gly His Gly Gly Cys Ser Ala Gly Asn Asp Ile
20 25

<210> 298

<211> 24

<212> PRT

<213> Homo sapiens

<400> 298

Gly Glu Arg Asp Asp Gln Gln Val Phe Ile Gln Lys Val Val Pro Ser
1 5 10 15

Ala Ser Gln Leu Phe Val Arg Leu
20

<210> 299

<211> 25

<212> PRT

<213> Homo sapiens

<400> 299

Arg Ser Val Asp Gly Ser Pro Thr Thr Ala Phe Thr Val Leu Glu Cys
1 5 10 15

Glu Gly Ser Pro Ala Ala Arg Leu Ser
20 25

<210> 300

<211> 26

<212> PRT

<213> Homo sapiens

<400> 300

Pro Ala Leu Pro Ala His Trp Pro Gly Gln Arg Gln Leu Gly His Val
1 5 10 15

Gly Pro Asn His Arg His Gly Arg Pro Arg
20 25

<210> 301

<211> 168

<212> PRT

<213> Homo sapiens

<400> 301

Pro Phe Ile Pro Arg Arg Pro Trp Pro Glu Pro Gly Val Pro Thr Gly
1 5 10 15

SUBSTITUTE SHEET (RULE 26)

163

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Ile Arg Glu Ala Pro Glu Ser Pro Arg Thr Arg Ala Ser Gln Gly Ile
      20                25                30
Met Ala Ala Ala Leu Phe Lys Lys Glu Val Ser Leu Ser Phe Ile Leu
      35                40                45
Gly Gly Val Arg Gly Val Pro Arg Pro Leu Glu Gly His Gly Ala Gly
      50                55                60
Val Gly Gly Arg Arg Arg Ser Gly Pro Leu Arg Thr Ser Ser Trp Gln
      65                70                75                80
Arg Ser Thr Lys Leu Pro Pro Pro Arg Arg Arg Ala Ser Ala Cys Gly
      85                90                95
Gly Leu Gly Leu Pro Arg Trp Pro Asp Lys Glu Val Leu Leu Glu Ala
      100               105               110
Glu Trp Arg Leu Val Arg Glu Met Arg Gly Glu Gly Leu Gly Arg Gln
      115               120               125
Pro His Glu Gly Ala Glu Arg Ser Arg Arg Gly Gln Leu Thr Val Phe
      130               135               140
Gln Leu Phe His Gln Leu Leu Leu Arg Gln Ala Thr Cys Arg Gly Leu
      145               150               155               160
Ala Glu Ala Val His Gly Gly Gly
      165

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<210> 302
<211> 32
<212> PRT
<213> Homo sapiens

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<400> 302
Pro Gly Val Pro Thr Gly Ile Arg Glu Ala Pro Glu Ser Pro Arg Thr
  1              5              10              15
Arg Ala Ser Gln Gly Ile Met Ala Ala Ala Leu Phe Lys Lys Glu Val
      20                25                30

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<210> 303
<211> 28
<212> PRT
<213> Homo sapiens

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<400> 303
Phe Ile Leu Gly Gly Val Arg Gly Val Pro Arg Pro Leu Glu Gly His
  1              5              10              15

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SUBSTITUTE SHEET (RULE 26)

164

Gly Ala Gly Val Gly Gly Arg Arg Arg Ser Gly Pro
 20 25

<210> 304

<211> 24

<212> PRT

<213> Homo sapiens

<400> 304

Gly Leu Pro Arg Trp Pro Asp Lys Glu Val Leu Leu Glu Ala Glu Trp
 1 5 10 15

Arg Leu Val Arg Glu Met Arg Gly
 20

<210> 305

<211> 23

<212> PRT

<213> Homo sapiens

<400> 305

Gly Ala Glu Arg Ser Arg Arg Gly Gln Leu Thr Val Phe Gln Leu Phe
 1 5 10 15

His Gln Leu Leu Leu Arg Gln
 20

<210> 306

<211> 15

<212> PRT

<213> Homo sapiens

<400> 306

His Ala Ser Ala His Ala Ser Ala His Ala Ser Gly Cys Gly Ala
 1 5 10 15

<210> 307

<211> 118

<212> PRT

<213> Homo sapiens

<400> 307

Gln Gly Val Gly Val Ala Asp Glu Gly Gly Leu Glu Arg Gln Arg Val
 1 5 10 15

Asp Ala Gly Ala Arg Leu Gly His Met Gly Gln Pro Val Ala Phe Ser
 20 25 30

Thr Arg Gln Leu His Leu Ala Leu Pro Ala Pro Gly Thr Ala Gly Val
 35 40 45

Thr Val Pro His Pro His Ala Arg Glu Gly Val Val Gly Asp Leu Pro
 50 55 60

SUBSTITUTE SHEET (RULE 26)

165

Leu Val Pro Asp Ala Glu Asp Pro Thr Val Gly Val Pro Ala Glu Gly
 65 70 75 80
 Leu Leu Val Leu Gly His Val Val Glu Arg Ala Glu Leu Ile Leu Val
 85 90 95
 Arg Gly Leu His Gln Ala Glu Ala Leu Ala Arg Glu Ser Glu Glu Met
 100 105 110
 His Gly Ser Arg His Gly
 115

<210> 308

<211> 25

<212> PRT

<213> Homo sapiens

<400> 308

Glu Gly Gly Leu Glu Arg Gln Arg Val Asp Ala Gly Ala Arg Leu Gly
 1 5 10 15

His Met Gly Gln Pro Val Ala Phe Ser
 20 25

<210> 309

<211> 29

<212> PRT

<213> Homo sapiens

<400> 309

Leu Ala Leu Pro Ala Pro Gly Thr Ala Gly Val Thr Val Pro His Pro
 1 5 10 15

His Ala Arg Glu Gly Val Val Gly Asp Leu Pro Leu Val
 20 25

<210> 310

<211> 28

<212> PRT

<213> Homo sapiens

<400> 310

Pro Ala Glu Gly Leu Leu Val Leu Gly His Val Val Glu Arg Ala Glu
 1 5 10 15

Leu Ile Leu Val Arg Gly Leu His Gln Ala Glu Ala
 20 25

<210> 311

<211> 125

<212> PRT

<213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

<220>

<221> SITE

<222> (32)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 311

His	Leu	Phe	Lys	Phe	Phe	Tyr	Thr	Ile	Ala	Phe	Met	Gln	Trp	Phe	Thr
1				5					10					15	

Glu	Phe	Met	Glu	Leu	Phe	Leu	Ser	Val	Trp	Glu	Leu	Ile	Lys	Thr	Xaa
			20					25					30		

Asn	Leu	Cys	Phe	Val	Cys	Phe	Ser	Glu	His	Lys	Pro	Gly	Gln	Leu	Val
		35					40					45			

Pro	Ala	Gly	Pro	Thr	Ser	Gln	Leu	Leu	Cys	Arg	Ala	Leu	Gly	Arg	Val
	50					55				60					

His	Leu	Cys	Ser	Pro	Thr	Thr	Arg	Ser	Gln	Thr	Pro	Thr	Gln	Ser	Trp
65					70					75					80

Val	Thr	Pro	Gln	Leu	Leu	Trp	Arg	Leu	Gly	Ser	Gly	Arg	Leu	Val	Ala
			85					90						95	

Gln	Val	Leu	Gln	Val	Gly	Ser	Phe	Cys	Gly	Pro	Arg	Val	Gly	Asp	Ala
		100						105					110		

Val	Leu	Gly	Glu	Gln	Thr	Phe	Gln	Pro	Phe	Asp	Leu	Leu
	115						120					125

<210> 312

<211> 29

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (23)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 312

Ala	Phe	Met	Gln	Trp	Phe	Thr	Glu	Phe	Met	Glu	Leu	Phe	Leu	Ser	Val
1				5					10					15	

Trp	Glu	Leu	Ile	Lys	Thr	Xaa	Asn	Leu	Cys	Phe	Val	Cys
		20						25				

<210> 313

<211> 26

<212> PRT

<213> Homo sapiens

<400> 313

Arg	Ser	Gln	Thr	Pro	Thr	Gln	Ser	Trp	Val	Thr	Pro	Gln	Leu	Leu	Trp
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

SUBSTITUTE SHEET (RULE 26)

167
 1 5 10 15
 Arg Leu Gly Ser Gly Arg Leu Val Ala Gln
 20 25

 <210> 314
 <211> 39
 <212> PRT
 <213> Homo sapiens

 <400> 314
 Gly Ala Trp Gly Val Glu Val Val Ala Val Gly Ser Lys Ala Gly Cys
 1 5 10 15

 Leu Val Tyr Gln Leu Cys Asp Leu Lys Gln Ile Thr Phe Phe Phe Arg
 20 25 30

 Ala Ser Val Cys Leu Ser Val
 35

<210> 315
 <211> 194
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (61)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (95)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (116)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (129)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (131)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (132)
 <223> Xaa equals any of the naturally occurring L-amino acids

SUBSTITUTE SHEET (RULE 26)

168

<220>
 <221> SITE
 <222> (163)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (187)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 315
 Pro Ala Ser Leu Gly Ser Ser Trp Gly Gln Lys Leu Arg Gly Gly Thr
 1 5 10 15
 Arg Lys Ser Phe Gln Glu Leu Ser Pro Ser Ser Ala Pro Pro Ala Cys
 20 25 30
 Leu Pro Gln Pro Pro Ala Ser Thr Trp Leu Ser Ser Trp Pro Arg Pro
 35 40 45
 Pro Cys Trp Pro Pro Met Cys Ser Trp Ala Leu Gly Xaa Cys Phe Cys
 50 55 60
 Pro Ala Thr Gly Gln Trp Leu Pro Thr Ser Cys Cys Leu Trp Trp Cys
 65 70 75 80
 Pro Asp Ala Gly Gly Arg Gln Lys His Phe Arg Ser Arg Trp Xaa Thr
 85 90 95
 Ser Trp Glu Thr Trp Gln Pro Tyr Leu Thr Gly Leu Ile Ser Ser Val
 100 105 110
 Leu Arg Ala Xaa Arg Pro Asp Ser Tyr Leu Gln Arg Phe Arg Ser Leu
 115 120 125
 Xaa Gln Xaa Xaa Leu Cys Cys Ala Phe Val Ile Ala Leu Gly Gly Gly
 130 135 140
 Cys Phe Leu Leu Thr Ala Leu Tyr Leu Glu Arg Asp Glu Thr Arg Ala
 145 150 155 160
 Trp Gln Xaa Val Thr Gly Thr Pro Asp Ser Asn Asp Val Asp Ser Asn
 165 170 175
 Asp Leu Glu Arg Gln Gly Leu Leu Ser Gly Xaa Gly Ala Ser Thr Glu
 180 185 190
 Glu Pro

<210> 316
 <211> 26
 <212> PRT
 <213> Homo sapiens

 <400> 316

SUBSTITUTE SHEET (RULE 26)

169

Leu Arg Gly Gly Thr Arg Lys Ser Phe Gln Glu Leu Ser Pro Ser Ser
 1 5 10 15

Ala Pro Pro Ala Cys Leu Pro Gln Pro Pro
 20 25

<210> 317

<211> 28

<212> PRT

<213> Homo sapiens

<400> 317

Ala Thr Gly Gln Trp Leu Pro Thr Ser Cys Cys Leu Trp Trp Cys Pro
 1 5 10 15

Asp Ala Gly Gly Arg Gln Lys His Phe Arg Ser Arg
 20 25

<210> 318

<211> 22

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 318

Gly Gly Cys Phe Leu Leu Thr Ala Leu Tyr Leu Glu Arg Asp Glu Thr
 1 5 10 15

Arg Ala Trp Gln Xaa Val
 20

<210> 319

<211> 124

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (76)

<223> Xaa equals any of the naturally occurring L-amino acids

SUBSTITUTE SHEET (RULE 26)

<220>
 <221> SITE
 <222> (93)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (105)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (106)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (107)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (108)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (109)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 319
 Ala Pro His Leu Arg Leu Gln Pro Ala Cys His Ser Pro Leu Pro Leu
 1 5 10 15
 Pro Gly Ser Arg Pro Gly Pro Asp His Pro Ala Gly Leu Leu Cys Val
 20 25 30
 Pro Gly Pro Trp Gly Xaa Ala Ser Val Leu Gln Leu Gly Ser Gly Cys
 35 40 45
 Arg His Pro Ala Val Cys Gly Gly Ala Gln Met Pro Gly Asp Gly Arg
 50 55 60
 Ser Thr Ser Asp His Gly Gly Xaa His Pro Gly Xaa Pro Gly Ser Pro
 65 70 75 80
 Ile Ser Gln Asp Leu Ser Leu Val Ser Cys Gly Pro Xaa Ala Leu Thr
 85 90 95
 Pro Ile Cys Ser Ala Ser Ala Ala Xaa Xaa Xaa Xaa Xaa Cys Ala Ala
 100 105 110
 Pro Leu Ser Ser Pro Trp Gly Ala Ala Ala Ser Cys
 115 120

SUBSTITUTE SHEET (RULE 26)

171

<210> 320

<211> 25

<212> PRT

<213> Homo sapiens

<400> 320

Pro Ala Cys His Ser Pro Leu Pro Leu Pro Gly Ser Arg Pro Gly Pro
 1 5 10 15

Asp His Pro Ala Gly Leu Leu Cys Val
 20 25

<210> 321

<211> 26

<212> PRT

<213> Homo sapiens

<400> 321

Ser Gly Cys Arg His Pro Ala Val Cys Gly Gly Ala Gln Met Pro Gly
 1 5 10 15

Asp Gly Arg Ser Thr Ser Asp His Gly Gly
 20 25

<210> 322

<211> 95

<212> PRT

<213> Homo sapiens

<400> 322

Gly Leu Lys Val Met Glu Ile Cys Ser Leu Thr Phe Leu Glu Ala Thr
 1 5 10 15

Asn Leu Gln Ser Arg Cys Gln Gln Ala Met Leu Pro Leu Lys Ala Leu
 20 25 30

Arg Lys Asn Pro Phe Leu Leu Leu Pro Ser Phe Asp Gly Cys Cys Gln
 35 40 45

Ser Leu Ala Phe Pro Gly Leu Trp Leu Gln His Ser Asn Leu Cys Leu
 50 55 60

Asn His His Met Thr Phe Leu Val Tyr Leu Leu Cys Val Ser Val Phe
 65 70 75 80

Lys Tyr Phe Phe Pro Phe Ser Cys Thr Tyr Thr Ser His Trp Ile
 85 90 95

<210> 323

<211> 22

<212> PRT

<213> Homo sapiens

<400> 323

SUBSTITUTE SHEET (RULE 26)

172

Ile Cys Ser Leu Thr Phe Leu Glu Ala Thr Asn Leu Gln Ser Arg Cys
 1 5 10 15

Gln Gln Ala Met Leu Pro
 20

<210> 324

<211> 26

<212> PRT

<213> Homo sapiens

<400> 324

Gly Leu Trp Leu Gln His Ser Asn Leu Cys Leu Asn His His Met Thr
 1 5 10 15

Phe Leu Val Tyr Leu Leu Cys Val Ser Val
 20 25

<210> 325

<211> 37

<212> PRT

<213> Homo sapiens

<400> 325

Pro Phe Pro Leu Leu Pro Pro Lys Arg Arg Gly Leu Leu Tyr His Leu
 1 5 10 15

Ile Gln Lys Ser Thr Leu Gly Leu Val Val Trp Phe Arg Glu His Leu
 20 25 30

Asp Ser Arg Ser Gln
 35

<210> 326

<211> 78

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (48)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

SUBSTITUTE SHEET (RULE 26)

<221> SITE

<222> (65)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 326

Arg Gly Xaa Pro Ser Trp Pro Met His Thr Leu Val Tyr Ala Gln His
 1 5 10 15

Ser Thr Thr His Thr Pro Leu Ile Gln Pro Gln Trp Thr Gln Val Ile
 20 25 30

Asp Gln Pro Pro Gly Ile Thr His Gln Phe Cys Val Arg Xaa Cys Xaa
 35 40 45

Cys Pro Thr Leu Glu Ser Cys Val Gln Glu Cys Val Thr Arg Ser Arg
 50 55 60

Xaa Lys Pro Thr Thr Gly Val Pro Gly Pro Gln Arg Leu Ala
 65 70 75

<210> 327

<211> 24

<212> PRT

<213> Homo sapiens

<400> 327

Thr Pro Leu Ile Gln Pro Gln Trp Thr Gln Val Ile Asp Gln Pro Pro
 1 5 10 15

Gly Ile Thr His Gln Phe Cys Val
 20

<210> 328

<211> 104

<212> PRT

<213> Homo sapiens

<400> 328

Ala Leu Gly Pro Ser Gln Thr Cys Asp Leu Asp Val Trp Leu Val Ala
 1 5 10 15

Lys Pro Ser Phe Phe Arg Gly Pro Gln Gly Ile His Tyr Phe Ser Leu
 20 25 30

Trp Arg Arg Lys Pro Leu Ser His Trp Val Ser Ile Trp Gln Leu Gln
 35 40 45

Gly Gln Glu Thr Met Pro Ala Met Leu Arg Ser Arg Pro Ala Gly Gln
 50 55 60

Ala Thr Val Ala Thr Gly Pro Pro Arg Gly Ser Pro Ser Pro Gln Asp
 65 70 75 80

Leu Pro Ser Tyr His Arg Lys Gln Val Glu Ser Ser His Arg His Ser
 85 90 95

SUBSTITUTE SHEET (RULE 26)

Trp Glu Pro Ala Ser Gln Ser Gln
100

<210> 329
<211> 28
<212> PRT
<213> Homo sapiens

<400> 329
Cys Asp Leu Asp Val Trp Leu Val Ala Lys Pro Ser Phe Phe Arg Gly
1 5 10 15

Pro Gln Gly Ile His Tyr Phe Ser Leu Trp Arg Arg
20 25

<210> 330
<211> 28
<212> PRT
<213> Homo sapiens

<400> 330
Ala Gly Gln Ala Thr Val Ala Thr Gly Pro Pro Arg Gly Ser Pro Ser
1 5 10 15

Pro Gln Asp Leu Pro Ser Tyr His Arg Lys Gln Val
20 25

<210> 331
<211> 79
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 331
Xaa Gly Asp Thr Xaa Thr Gln Asn Ser Arg His Asp Thr Pro Xaa Leu
1 5 10 15

Ile Asp Tyr Tyr Arg Glu Ser Cys Thr Leu Gln Tyr Arg Pro Glu Phe
20 25 30

SUBSTITUTE SHEET (RULE 26)

175

Pro Gly Arg Pro Thr Arg Pro Arg Gly Ser Cys Pro Gln Tyr Pro Gly
 35 40 45

Pro Ala Ile Pro Arg Thr Ser Trp Ala Leu Gly Glu Gly Asp Ala Ala
 50 55 60

Pro Arg Gly Ala His His Pro Arg Arg Ala Asp Val Pro Leu Gly
 65 70 75

<210> 332

<211> 30

<212> PRT

<213> Homo sapiens

<400> 332

Tyr Arg Glu Ser Cys Thr Leu Gln Tyr Arg Pro Glu Phe Pro Gly Arg
 1 5 10 15

Pro Thr Arg Pro Arg Gly Ser Cys Pro Gln Tyr Pro Gly Pro
 20 25 30

<210> 333

<211> 155

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 333

Gly Lys Leu Tyr Ala Ala Val Pro Ser Gly Ile Pro Gly Ser Thr His
 1 5 10 15

Ala Ser Ala Arg Leu Met Pro Pro Val Ser Arg Ser Ser Tyr Ser Glu
 20 25 30

Asp Ile Val Gly Ser Arg Arg Arg Arg Arg Ser Ser Ser Gly Ser Pro
 35 40 45

Pro Ser Pro Gln Ser Arg Cys Ser Ser Trp Asp Gly Cys Ser Arg Ser
 50 55 60

His Ser Arg Gly Arg Glu Gly Xaa Arg Pro Pro Trp Ser Glu Leu Asp
 65 70 75 80

Val Gly Ala Leu Tyr Pro Phe Ser Arg Ser Gly Ser Arg Gly Arg Leu
 85 90 95

Pro Arg Phe Arg Asn Tyr Ala Phe Ala Ser Ser Trp Ser Thr Ser Tyr
 100 105 110

Ser Gly Tyr Arg Tyr His Arg Ala Leu Leu Cys Arg Arg Thr Ala Val

SUBSTITUTE SHEET (RULE 26)

176

115 120 125

Ser Gly Arg Leu Arg Glu Gly Arg Glu Pro Ser Ala Glu Glu Ala Glu
 130 135 140

Gly Glu Arg Glu Asp Trp Gly Ile Gly Ser Ala
 145 150 155

<210> 334
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 334
 Ser Gly Ile Pro Gly Ser Thr His Ala Ser Ala Arg Leu Met Pro Pro
 1 5 10 15

Val Ser Arg Ser Ser Tyr Ser
 20

<210> 335
 <211> 29
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (13)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 335
 Gly Cys Ser Arg Ser His Ser Arg Gly Arg Glu Gly Xaa Arg Pro Pro
 1 5 10 15

Trp Ser Glu Leu Asp Val Gly Ala Leu Tyr Pro Phe Ser
 20 25

<210> 336
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 336
 Thr Ala Val Ser Gly Arg Leu Arg Glu Gly Arg Glu Pro Ser Ala Glu
 1 5 10 15

Glu Ala Glu Gly Glu Arg Glu Asp Trp
 20 25

<210> 337
 <211> 134
 <212> PRT
 <213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 337

Arg	Ile	Arg	Lys	Ala	Ala	Val	Gln	Ile	Pro	Thr	Arg	Lys	Asn	Ile	Gly
1				5					10					15	

Xaa	Arg	Arg	Pro	Val	Val	Gln	Glu	Thr	Arg	Lys	Lys	Glu	Arg	Ile	Ser
			20					25					30		

Arg	Leu	Lys	Glu	Ser	Ile	Gly	Asn	Ile	Leu	Ile	Val	Thr	Val	Thr	Gln
	35						40					45			

Ser	Leu	Thr	Gln	Ile	Leu	Thr	Leu	Met	Met	Ile	Lys	Arg	Glu	Leu	Lys
	50					55					60				

Pro	Arg	Arg	Lys	Arg	Arg	Lys	Arg	Asn	Thr	Lys	Gln	Xaa	Lys	Arg	Arg
65					70					75					80

Ile	Arg	Lys	Pro	Lys	Lys	Asn	Pro	Val	Thr	Gln	Ala	Val	Lys	Thr	Gln
				85					90					95	

Lys	Arg	Thr	Cys	Gln	Lys	Leu	Pro	Gly	Met	Glu	Gln	Pro	Asn	Val	Ala
			100					105					110		

Asp	Thr	Met	Asp	Leu	Ile	Gly	Pro	Glu	Ala	Pro	Ile	Asn	Thr	Tyr	Leu
	115						120					125			

Phe	Lys	Met	Lys	Asn	Leu
	130				

<210> 338

<211> 28

<212> PRT

<213> Homo sapiens

<400> 338

Thr	Arg	Lys	Lys	Glu	Arg	Ile	Ser	Arg	Leu	Lys	Glu	Ser	Ile	Gly	Asn
1				5					10					15	

Ile	Leu	Ile	Val	Thr	Val	Thr	Gln	Ser	Leu	Thr	Gln
			20				25				

<210> 339

<211> 28

<212> PRT

<213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

<400> 339

Val Lys Thr Gln Lys Arg Thr Cys Gln Lys Leu Pro Gly Met Glu Gln
 1 5 10 15

Pro Asn Val Ala Asp Thr Met Asp Leu Ile Gly Pro
 20 25

<210> 340

<211> 80

<212> PRT

<213> Homo sapiens

<400> 340

Leu Pro Phe Thr Leu Lys Pro Lys Met Val Lys Ile Pro Phe Ser Ser
 1 5 10 15

Arg Leu Ile Asn Asn Asn Leu Gln Tyr Ile Asp Cys Ile Leu Ser Leu
 20 25 30

Lys Arg Cys Glu Glu Ile Leu Leu Met Trp His Gly Leu Leu Leu Cys
 35 40 45

Leu Ala Ser Val Phe Leu Glu Leu Arg Gly Asp Arg Pro Pro Leu Leu
 50 55 60

Ala Ser Leu Leu Glu Pro His Lys Met Pro Leu His Ser Ser Ser Leu
 65 70 75 80

<210> 341

<211> 24

<212> PRT

<213> Homo sapiens

<400> 341

Leu Lys Pro Lys Met Val Lys Ile Pro Phe Ser Ser Arg Leu Ile Asn
 1 5 10 15

Asn Asn Leu Gln Tyr Ile Asp Cys
 20

<210> 342

<211> 23

<212> PRT

<213> Homo sapiens

<400> 342

Ser Leu Lys Arg Cys Glu Glu Ile Leu Leu Met Trp His Gly Leu Leu
 1 5 10 15

Leu Cys Leu Ala Ser Val Phe

SUBSTITUTE SHEET (RULE 26)

20

<210> 343

<211> 21

<212> PRT

<213> Homo sapiens

<400> 343

Leu Arg Gly Asp Arg Pro Pro Leu Leu Ala Ser Leu Leu Glu Pro His
 1 5 10 15

Lys Met Pro Leu His
 20

<210> 344

<211> 79

<212> PRT

<213> Homo sapiens

<400> 344

Leu Gln Met His Thr Gly Ser Gly Phe Lys Gly Lys Ser Cys Glu Val
 1 5 10 15

Ala Phe Tyr Val Ala Gln Ala Glu Lys Pro Gly Glu Gly Ala Tyr Leu
 20 25 30

His Gly Ala Gln Glu Thr Gln Lys Gln Gly Ile Glu Ala Asp His Ala
 35 40 45

Thr Leu Arg Gly Ser Pro His Ser Val Ser Lys Thr Lys Tyr Asn Leu
 50 55 60

Tyr Ile Ala Asn Tyr Tyr Leu Leu Ala Trp Arg Lys Met Glu Ser
 65 70 75

<210> 345

<211> 20

<212> PRT

<213> Homo sapiens

<400> 345

Cys Glu Val Ala Phe Tyr Val Ala Gln Ala Glu Lys Pro Gly Glu Gly
 1 5 10 15

Ala Tyr Leu His
 20

<210> 346

<211> 23

<212> PRT

<213> Homo sapiens

<400> 346

SUBSTITUTE SHEET (RULE 26)

180

Ala Thr Leu Arg Gly Ser Pro His Ser Val Ser Lys Thr Lys Tyr Asn
 1 5 10 15

Leu Tyr Ile Ala Asn Tyr Tyr
 20

<210> 347

<211> 65

<212> PRT

<213> Homo sapiens

<400> 347

Leu Ser Ala Ser Leu Leu Asp Arg Tyr Pro Ala Ser Glu Ser Asn Asn
 1 5 10 15

Tyr Ile Phe Asn Phe Val Leu Tyr Met Leu His Phe Leu Ala Gly Thr
 20 25 30

Leu Phe Ser Leu Phe Pro Asp Phe Glu Leu Ser Pro Arg Ser Ala Thr
 35 40 45

Leu Phe Pro Asp Leu Arg Thr Val Gln Leu Leu Ser Ser Arg Pro His
 50 55 60

Leu

65

<210> 348

<211> 23

<212> PRT

<213> Homo sapiens

<400> 348

Leu Leu Asp Arg Tyr Pro Ala Ser Glu Ser Asn Asn Tyr Ile Phe Asn
 1 5 10 15

Phe Val Leu Tyr Met Leu His
 20

<210> 349

<211> 20

<212> PRT

<213> Homo sapiens

<400> 349

Phe Pro Asp Phe Glu Leu Ser Pro Arg Ser Ala Thr Leu Phe Pro Asp
 1 5 10 15

Leu Arg Thr Val
 20

<210> 350

<211> 85

SUBSTITUTE SHEET (RULE 26)

<212> PRT

<213> Homo sapiens

<400> 350

Asn Gly Gly Phe Tyr Asp Val Ser Phe Lys Gln Ala Gly Leu Ile Glu
 1 5 10 15

Phe Leu Cys Ile Ile Tyr Phe Tyr Pro Met Ala His Val Ile Cys Gly
 20 25 30

Ser Arg Phe Thr Ile Val Arg Thr Ile Pro Val His Tyr Val Gly Glu
 35 40 45

Tyr Phe Ile Lys Ser Ser Ile Trp Ile Leu Tyr Arg Ile Asn Glu Arg
 50 55 60

Thr Ala Thr Lys Lys Ala Ala Ser Asp Phe Gln Lys Asn Phe Arg Cys
 65 70 75 80

Phe Leu Asp Ala Phe
 85

<210> 351

<211> 19

<212> PRT

<213> Homo sapiens

<400> 351

Lys Gln Ala Gly Leu Ile Glu Phe Leu Cys Ile Ile Tyr Phe Tyr Pro
 1 5 10 15

Met Ala His

<210> 352

<211> 23

<212> PRT

<213> Homo sapiens

<400> 352

Tyr Phe Ile Lys Ser Ser Ile Trp Ile Leu Tyr Arg Ile Asn Glu Arg
 1 5 10 15

Thr Ala Thr Lys Lys Ala Ala
 20

<210> 353

<211> 22

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

SUBSTITUTE SHEET (RULE 26)

182

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 353

Ser	Pro	Arg	Xaa	Gly	Arg	Xaa	Phe	Xaa	Thr	Ser	Arg	Lys	Gln	Ile	Ser
1				5					10					15	

Gly	Phe	Leu	Glu	Phe	Asp
			20		

<210> 354

<211> 56

<212> PRT

<213> Homo sapiens

<400> 354

Met	Lys	His	Ala	Ala	Phe	Gly	Leu	Ile	Pro	Leu	Val	Lys	Glu	Ile	Tyr
1				5					10					15	

Arg	Tyr	Leu	Lys	Ile	Lys	Ser	Lys	Leu	Leu	Ile	Gly	Ser	Gly	Lys	Cys
		20					25						30		

Gln	Leu	Gln	Pro	Glu	Trp	Leu	Gln	Thr	Ser	Leu	Ile	Asn	Ser	Ser	Leu
		35					40					45			

Leu	Met	Asp	Trp	Leu	Thr	Pro	Tyr
	50					55	

<210> 355

<211> 29

<212> PRT

<213> Homo sapiens

<400> 355

Ile	Tyr	Arg	Tyr	Leu	Lys	Ile	Lys	Ser	Lys	Leu	Leu	Ile	Gly	Ser	Gly
1				5					10					15	

Lys	Cys	Gln	Leu	Gln	Pro	Glu	Trp	Leu	Gln	Thr	Ser	Leu
		20						25				

<210> 356

<211> 68

<212> PRT

<213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

183

<400> 356

Gln Leu Gly Leu Pro Trp Asp Gln Ser Lys Gly Pro Arg Lys Asn Gly
 1 5 10 15

Leu Ser Met Cys Gly Ser Val Tyr Ser Thr Ile Trp Ser Leu Ile Ala
 20 25 30

Ser Arg Arg Glu Glu Thr Ile Arg Val Ile Val Leu Tyr Ile Gln Ser
 35 40 45

Pro Asn Ile Asn Thr Arg His Ile Ser Lys Arg Gly Leu Asn Lys Ala
 50 55 60

Leu Thr Asn Pro
 65

<210> 357

<211> 21

<212> PRT

<213> Homo sapiens

<400> 357

Ser Lys Gly Pro Arg Lys Asn Gly Leu Ser Met Cys Gly Ser Val Tyr
 1 5 10 15

Ser Thr Ile Trp Ser
 20

<210> 358

<211> 17

<212> PRT

<213> Homo sapiens

<400> 358

Gln Ser Pro Asn Ile Asn Thr Arg His Ile Ser Lys Arg Gly Leu Asn
 1 5 10 15

Lys

<210> 359

<211> 19

<212> PRT

<213> Homo sapiens

<400> 359

His Pro Gln Thr Ser Ala Gly Gly Phe Pro Leu His Gln Gly Leu Pro
 1 5 10 15

Thr Val Ser

<210> 360

SUBSTITUTE SHEET (RULE 26)

184

<211> 117

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (110)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 360

Pro	Ser	Trp	Phe	Pro	Glu	Leu	Ser	Pro	Trp	Pro	Leu	Lys	Thr	Leu	Lys
1				5					10					15	

Lys	Arg	Arg	Gln	Met	Arg	Leu	Arg	Arg	Arg	Gly	Arg	Leu	Cys	Arg	Leu
			20					25					30		

Ser	Pro	Ala	Thr	Thr	Thr	Thr	Ala	Asp	Thr	Cys	Arg	Cys	Pro	Ala	Arg
		35						40				45			

Ser	Tyr	Arg	Gly	Ser	Gly	Arg	Arg	Pro	Ala	Cys	Ala	Gln	Asp	Ser	Pro
	50					55					60				

Ala	Pro	Pro	Ser	Arg	Pro	Thr	Arg	Arg	Ala	Trp	Glu	Lys	Cys	Ala	Leu
65					70					75					80

Arg	Pro	Lys	Arg	Ala	Ala	Gln	Trp	Ser	Thr	Gly	Val	Pro	Pro	Ser	Pro
				85					90					95	

Arg	Ser	Ser	Thr	Thr	Gly	Cys	Cys	Phe	Gly	Thr	Ala	Ala	Xaa	Cys	Ala
			100					105					110		

Glu	Gly	Ala	Arg	Arg
			115	

<210> 361

<211> 22

<212> PRT

<213> Homo sapiens

<400> 361

Thr	Thr	Thr	Ala	Asp	Thr	Cys	Arg	Cys	Pro	Ala	Arg	Ser	Tyr	Arg	Gly
1				5					10					15	

Ser	Gly	Arg	Arg	Pro	Ala
			20		

<210> 362

<211> 24

<212> PRT

<213> Homo sapiens

<400> 362

Pro	Ser	Arg	Pro	Thr	Arg	Arg	Ala	Trp	Glu	Lys	Cys	Ala	Leu	Arg	Pro
1				5					10					15	

SUBSTITUTE SHEET (RULE 26)

185

Lys Arg Ala Ala Gln Trp Ser Thr
20

<210> 363
<211> 20
<212> PRT
<213> Homo sapiens

<400> 363
Ala Arg Gly Val Leu Asn Leu Arg Asn Arg Phe Glu Cys Phe Ser Ile
1 5 10 15

Ile Glu Thr Val
20

<210> 364
<211> 69
<212> PRT
<213> Homo sapiens

<400> 364
Ile Gly Gln Leu Val Met Lys Ser Ile Cys His Phe Gln Arg Leu Leu
1 5 10 15

Ser Val Ala Ile Asp Phe Ala Ser Gln Phe Leu Lys Asn Tyr Ile Phe
20 25 30

Ser Ser Thr His Ser Ser Lys Ala Gly Phe Ser Val Val Cys Ser Leu
35 40 45

Pro Lys Trp Leu Tyr Thr Asp Gly Met Glu Met Val Leu Lys Ile Thr
50 55 60

His Lys Leu Ser Phe
65

<210> 365
<211> 24
<212> PRT
<213> Homo sapiens

<400> 365
Gln Arg Leu Leu Ser Val Ala Ile Asp Phe Ala Ser Gln Phe Leu Lys
1 5 10 15

Asn Tyr Ile Phe Ser Ser Thr His
20

<210> 366
<211> 12
<212> PRT
<213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

186

<400> 366

Leu Met Lys Thr Ala Ser Arg Met Leu Leu Leu Glu
 1 5 10

<210> 367

<211> 25

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 367

Ala Thr Xaa Trp Asp Xaa Pro Gly Cys Arg Asn Ser Ala Arg Gly Glu
 1 5 10 15

Arg Leu His Val Gly Asp Ala Pro Trp
 20 25

<210> 368

<211> 109

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (102)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (105)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 368

Ala Arg Asp Glu Arg Arg Glu Val Leu Lys Thr Leu Met Arg Leu Ser
 1 5 10 15

Thr Gln Arg Pro Gln Ala Phe Leu Pro Ser Gln Ser Trp Phe Val Arg
 20 25 30

Leu Gln Lys Ala Gly Glu Gly Ala Leu Lys Gln Glu Asn Ser Leu Thr
 35 40 45

Ile Gln Asn Cys Leu Leu Cys Leu Pro Arg Val His Arg Gln Arg Pro
 50 55 60

Thr Pro Pro Gln Pro Gln Arg Gly Asn Thr Glu Ala Ser Val Leu Gln

SUBSTITUTE SHEET (RULE 26)

187
 65 70 75 80
 Thr Ser Thr Glu His Leu Pro Arg Ala Ala Val Leu Leu Val Pro Asn
 85 90 95
 Ser Cys Ser Pro Gly Xaa Pro Thr Xaa Leu Leu Ser Ser
 100 105

<210> 369
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 369
 Glu Arg Arg Glu Val Leu Lys Thr Leu Met Arg Leu Ser Thr Gln Arg
 1 5 10 15
 Pro Gln Ala Phe Leu Pro
 20

<210> 370
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 370
 Gly Ala Leu Lys Gln Glu Asn Ser Leu Thr Ile Gln Asn Cys Leu Leu
 1 5 10 15
 Cys Leu Pro Arg Val His Arg Gln Arg
 20 25

<210> 371
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 371
 Ser Val Leu Gln Thr Ser Thr Glu His Leu Pro Arg Ala Ala Val Leu
 1 5 10 15
 Leu Val Pro Asn Ser
 20

<210> 372
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 372
 Ala Leu Val Ile Ser Asn Pro Leu Leu
 1 5

SUBSTITUTE SHEET (RULE 26)

<210> 373
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 373
 Pro Tyr Ile Asn Thr Gln Met Cys Val Ser Ser Arg Asn Lys Phe Cys
 1 5 10 15
 Ile Ser Gly His Gln Lys Tyr Asp Ser His Gly Arg Glu Thr Arg Phe
 20 25 30
 Glu Met His Lys Ala Arg Ala Ser Ser Trp Lys Asn Ile Leu Lys Ile
 35 40 45
 Arg Ser Leu Lys Ile Ile Ser Arg Gly Phe Glu Ile Thr Asn Ala
 50 55 60

<210> 374
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 374
 Lys Phe Cys Ile Ser Gly His Gln Lys Tyr Asp Ser His Gly Arg Glu
 1 5 10 15
 Thr Arg Phe Glu Met His Lys Ala Arg Ala Ser
 20 25

<210> 375
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 375
 His Thr Leu Leu Glu Ile Ala Asn Pro Leu Gln Ala Ala Val Leu Gly
 1 5 10 15
 Ala Ser Ser Ile His Pro Ser Ile His Thr Ser Thr His Leu Met Phe
 20 25 30
 Met Gly Leu Lys Trp Thr Glu Leu His His Ser Pro Asp Ser Val Gln
 35 40 45
 Gly Ala Gly Ala Ala Glu Ala Ala Gln Thr Arg His Ser Leu Arg Pro
 50 55 60
 Gly Arg Gly Arg Glu Arg His Asp Cys Thr Leu Lys Asn Leu Thr Leu
 65 70 75 80
 Phe Ile Ile Cys

SUBSTITUTE SHEET (RULE 26)

<210> 376
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 376
 Asn Pro Leu Gln Ala Ala Val Leu Gly Ala Ser Ser Ile His Pro Ser
 1 5 10 15
 Ile His Thr Ser Thr His
 20

<210> 377
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 377
 Ser Leu Arg Pro Gly Arg Gly Arg Glu Arg His Asp Cys Thr Leu Lys
 1 5 10 15

Asn

<210> 378
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 378
 Ala Glu Asn Val His Cys Thr Pro Ala Trp Glu Thr Gly Arg Asp Ser
 1 5 10 15
 Glu Asp Gly Lys Gly Arg Glu Gly Met Gly Arg Asp Arg Lys Gly Trp
 20 25 30
 Asp Gly Thr Gly Leu Asp Gly Thr Gly Trp Glu Gly Lys Arg Glu Arg
 35 40 45
 Asn Val Pro Ala
 50

<210> 379
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 379
 Gly Arg Asp Ser Glu Asp Gly Lys Gly Arg Glu Gly Met Gly Arg Asp
 1 5 10 15
 Arg Lys Gly Trp Asp Gly Thr Gly Leu Asp
 20 25

SUBSTITUTE SHEET (RULE 26)

<210> 380
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 380
 Thr Ser Leu Gly Asp Leu Trp Asp Tyr Asn Asn Ser Ser His
 1 5 10

<210> 381
 <211> 66
 <212> PRT
 <213> Homo sapiens

<400> 381
 Asp Arg Arg Ile Ile Arg Thr Arg Glu Ala Ala Val Ala Val Ser Arg
 1 5 10 15

 Glu Arg Pro Leu His Ser Ser Leu Gly Asn Arg Glu Arg Leu Arg Arg
 20 25 30

 Trp Glu Gly Thr Gly Arg Asp Gly Lys Gly Gln Glu Gly Met Gly Arg
 35 40 45

 Asp Gly Thr Gly Trp Asp Gly Met Gly Arg Glu Glu Arg Lys Lys Cys
 50 55 60

 Pro Ser
 65

<210> 382
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 382
 Arg Pro Leu His Ser Ser Leu Gly Asn Arg Glu Arg Leu Arg Arg Trp
 1 5 10 15

 Glu Gly Thr Gly Arg Asp Gly Lys Gly
 20 25

<210> 383
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 383
 Asn Gln Ser Trp Gly Pro Met Gly Leu
 1 5

SUBSTITUTE SHEET (RULE 26)

191

<210> 384

<211> 59

<212> PRT

<213> Homo sapiens

<400> 384

Gly Gly Gly Gly Cys Ser Glu Pro Arg Thr Ser Ile Ala Leu Gln Pro
 1 5 10 15

Gly Lys Gln Gly Glu Thr Pro Lys Met Gly Arg Asp Gly Lys Gly Trp
 20 25 30

Glu Gly Thr Gly Arg Asp Gly Thr Gly Arg Asp Trp Met Gly Arg Asp
 35 40 45

Gly Lys Gly Arg Glu Lys Glu Met Ser Gln Gln
 50 55

<210> 385

<211> 24

<212> PRT

<213> Homo sapiens

<400> 385

Lys Gln Gly Glu Thr Pro Lys Met Gly Arg Asp Gly Lys Gly Trp Glu
 1 5 10 15

Gly Thr Gly Arg Asp Gly Thr Gly
 20

<210> 386

<211> 32

<212> PRT

<213> Homo sapiens

<400> 386

Pro Val Leu Gly Thr Tyr Gly Thr Ile Thr Thr Pro Val Thr Glu Leu
 1 5 10 15

Thr Lys Gly Gln Glu Lys Glu Gly Gly Val Glu Thr Val Leu Tyr Glu
 20 25 30

<210> 387

<211> 11

<212> PRT

<213> Homo sapiens

<400> 387

Lys Ile Val Phe Ile Asp Gln Lys Trp Ser Lys
 1 5 10

SUBSTITUTE SHEET (RULE 26)

<210> 388
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 388
 Cys Ser Leu Phe Trp Gly Ile Leu Phe Leu Ser Arg Leu Arg Ile His
 1 5 10 15
 Leu Phe Leu Ser Leu Lys Pro Cys Met Cys Leu Arg Pro Ile Asp Ile
 20 25 30
 Leu Ser His Phe Leu Asp Ile Phe Val Thr Ser Val Leu Ser Glu Leu
 35 40 45
 Glu Lys Ser Ser Leu Lys Thr Thr Glu Thr Phe Ser Phe Ala Val Phe
 50 55 60
 Leu Leu Leu Met Met Asn
 65 70

<210> 389
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 389
 Leu Ser Arg Leu Arg Ile His Leu Phe Leu Ser Leu Lys Pro Cys Met
 1 5 10 15
 Cys Leu Arg Pro Ile Asp Ile Leu Ser His
 20 25

<210> 390
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 390
 Val Leu Ser Glu Leu Glu Lys Ser Ser Leu Lys Thr Thr Glu Thr Phe
 1 5 10 15
 Ser Phe Ala Val Phe Leu
 20

<210> 391
 <211> 8
 <212> PRT
 <213> Homo sapiens

<400> 391
 Thr Leu Phe Arg Tyr Ile Leu His
 1 5

SUBSTITUTE SHEET (RULE 26)

<210> 392
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 392
 Gly Thr Ser Phe Ser Val Leu Ser Leu Ile His Asp Thr Gly
 1 5 10

<210> 393
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 393
 Val Leu Ile Ser Ala Ser Thr Ile Gly Ser Arg Thr Ser Gly Ala Gln
 1 5 10 15
 Gly Met Glu Lys Met Thr Ile Pro Thr Leu Ala Val Gly Glu Pro Lys
 20 25 30
 Thr Pro Glu Lys Ser Lys Cys Ser Leu Lys Gln Cys Phe Ser Ser Cys
 35 40 45
 Asn Val His Ile Asp His Leu Gly Leu Leu Leu Lys Cys Lys Phe
 50 55 60

<210> 394
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 394
 Ala Ser Thr Ile Gly Ser Arg Thr Ser Gly Ala Gln Gly Met Glu Lys
 1 5 10 15
 Met Thr Ile Pro Thr Leu Ala
 20

<210> 395
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 395
 Gly Glu Pro Lys Thr Pro Glu Lys Ser Lys Cys Ser Leu Lys Gln Cys
 1 5 10 15
 Phe Ser Ser Cys Asn Val His Ile Asp His Leu
 20 25

SUBSTITUTE SHEET (RULE 26)

194

<210> 396

<211> 101

<212> PRT

<213> Homo sapiens

<400> 396

Arg Ile Arg Ser Gln Asp Leu Ala Ile Met Thr Thr Cys Phe Lys Lys
 1 5 10 15

Tyr Glu Phe Ser Phe Phe Val Leu Gly Phe Leu Arg Arg Trp Gly Ala
 20 25 30

Thr Leu Cys Leu Gly Phe Thr Ser Phe Ala Ile Lys Phe His Pro Ser
 35 40 45

Ser Leu Cys Ser Glu Lys Glu Gly Lys Asp Phe Ser Gly Phe Ala Leu
 50 55 60

Ser Ile His Gly Pro Glu Arg Lys Lys Glu Glu Gly Trp Ala Arg Trp
 65 70 75 80

Leu Thr Pro Val Val Pro Val Leu Trp Glu Ala Glu Val Gly Gly Ser
 85 90 95

Pro Glu Val Ser Ser
 100

<210> 397

<211> 22

<212> PRT

<213> Homo sapiens

<400> 397

Thr Thr Cys Phe Lys Lys Tyr Glu Phe Ser Phe Phe Val Leu Gly Phe
 1 5 10 15

Leu Arg Arg Trp Gly Ala
 20

<210> 398

<211> 26

<212> PRT

<213> Homo sapiens

<400> 398

Ser Glu Lys Glu Gly Lys Asp Phe Ser Gly Phe Ala Leu Ser Ile His
 1 5 10 15

Gly Pro Glu Arg Lys Lys Glu Glu Gly Trp
 20 25

<210> 399

<211> 86

<212> PRT

SUBSTITUTE SHEET (RULE 26)

195

<213> Homo sapiens

<400> 399

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Met Asn Glu Cys Ile Ala Lys Pro Cys Met Ala Ala Phe Cys Ser Cys
 1             5             10             15

Pro Ser Cys Cys Leu Pro Ser Arg Pro Gly Cys Ser Arg Glu Gln Arg
      20             25             30

Cys Ala Phe Ser Cys Glu Pro Cys His Thr Val Glu His Trp Val Glu
      35             40             45

Pro Met Gly Gln Gly Gln Arg Gln Glu His Thr Gln Gly Ser Val Leu
      50             55             60

Pro Ser Ser His Pro Ser Arg Gly Lys Ala Thr Thr Val His Ser Cys
      65             70             75             80

Cys Gln Glu Pro Trp Gly
              85

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<210> 400

<211> 27

<212> PRT

<213> Homo sapiens

<400> 400

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Phe Cys Ser Cys Pro Ser Cys Cys Leu Pro Ser Arg Pro Gly Cys Ser
 1             5             10             15

Arg Glu Gln Arg Cys Ala Phe Ser Cys Glu Pro
      20             25

```

<210> 401

<211> 23

<212> PRT

<213> Homo sapiens

<400> 401

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Gly Gln Arg Gln Glu His Thr Gln Gly Ser Val Leu Pro Ser Ser His
 1             5             10             15

Pro Ser Arg Gly Lys Ala Thr
      20

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<210> 402

<211> 139

<212> PRT

<213> Homo sapiens

<400> 402

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Gly Val Val Asn Ser Cys Leu Leu Pro Leu Pro Pro Arg Leu Leu Ala
 1             5             10             15

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SUBSTITUTE SHEET (RULE 26)

196

Thr Gly Met Asp Cys Gly Gly Phe Ala Ser Arg Arg Met Gly Gly Arg
 20 25 30
 Gln His Ala Ala Leu Ser Val Phe Leu Pro Leu Pro Leu Ala His Gly
 35 40 45
 Leu Tyr Pro Met Phe Asn Cys Val Ala Gly Leu Thr Gly Lys Gly Thr
 50 55 60
 Ser Leu Leu Ser Gly Ala Ala Arg Pro Ala Gly Glu Ala Ala Ala Arg
 65 70 75 80
 Ala Gly Thr Lys Gly Ser His Ala Arg Phe Gly Asn Ala Phe Ile His
 85 90 95
 Ser Phe Ile His Ser Phe Ile Glu Cys Leu Leu Asn Thr Tyr Cys Val
 100 105 110
 Pro Ser Ser Ala Leu Thr Ala Val Gly Ile Gly Asp Ile Leu Lys Asn
 115 120 125
 Lys Asn Asp Lys Ser Ser Cys Leu Cys Ser Cys
 130 135

<210> 403

<211> 25

<212> PRT

<213> Homo sapiens

<400> 403

Gly Met Asp Cys Gly Gly Phe Ala Ser Arg Arg Met Gly Gly Arg Gln
 1 5 10 15
 His Ala Ala Leu Ser Val Phe Leu Pro
 20 25

<210> 404

<211> 25

<212> PRT

<213> Homo sapiens

<400> 404

Leu Thr Gly Lys Gly Thr Ser Leu Leu Ser Gly Ala Ala Arg Pro Ala
 1 5 10 15
 Gly Glu Ala Ala Ala Arg Ala Gly Thr
 20 25

<210> 405

<211> 22

<212> PRT

<213> Homo sapiens

<400> 405

SUBSTITUTE SHEET (RULE 26)

197

Leu Asn Thr Tyr Cys Val Pro Ser Ser Ala Leu Thr Ala Val Gly Ile
 1 5 10 15

Gly Asp Ile Leu Lys Asn
 20

<210> 406

<211> 55

<212> PRT

<213> Homo sapiens

<400> 406

Thr Ser Leu Ser Gln Leu Trp His Phe Cys His Phe Trp Pro Val Lys
 1 5 10 15

Phe Cys Cys Gly Gly Cys Pro Val His Cys Arg Met Phe Ser Ser Ile
 20 25 30

Ser Gly Leu Tyr Leu Leu Asn Ala Ser Ala Pro Ser Leu Gln Leu Asn
 35 40 45

Asp Pro Lys Cys Leu Gln Thr
 50 55

<210> 407

<211> 28

<212> PRT

<213> Homo sapiens

<400> 407

Trp Pro Val Lys Phe Cys Cys Gly Gly Cys Pro Val His Cys Arg Met
 1 5 10 15

Phe Ser Ser Ile Ser Gly Leu Tyr Leu Leu Asn Ala
 20 25

<210> 408

<211> 20

<212> PRT

<213> Homo sapiens

<400> 408

Ser Cys Arg Cys Trp Ala Leu Gly Ala Gly Gly Gly Gln Arg Gln Trp
 1 5 10 15

Val Gly Arg Ser
 20

<210> 409

<211> 80

<212> PRT

<213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

198

<400> 409

Thr Gly Ala Gln Ala Pro Lys Met Gly Ala Arg Gln Arg Lys Arg Pro
 1 5 10 15

Leu Gln Thr Arg Ile Lys Asn Ser Ser Lys Ser Thr Leu Trp Pro Pro
 20 25 30

Gln Trp Val Arg Cys Gly Arg Trp Trp Thr Trp Pro Ser Arg Lys Lys
 35 40 45

Thr Ser Arg Pro Arg Arg Gln Leu Phe Thr Ser Thr Leu Ser Thr Ser
 50 55 60

Ala Ser Ala Leu Val Trp Pro Val Ser Trp Phe Ser Gln Glu Gly His
 65 70 75 80

<210> 410

<211> 25

<212> PRT

<213> Homo sapiens

<400> 410

Met Gly Ala Arg Gln Arg Lys Arg Pro Leu Gln Thr Arg Ile Lys Asn
 1 5 10 15

Ser Ser Lys Ser Thr Leu Trp Pro Pro
 20 25

<210> 411

<211> 23

<212> PRT

<213> Homo sapiens

<400> 411

Pro Arg Arg Gln Leu Phe Thr Ser Thr Leu Ser Thr Ser Ala Ser Ala
 1 5 10 15

Leu Val Trp Pro Val Ser Trp
 20

<210> 412

<211> 25

<212> PRT

<213> Homo sapiens

<400> 412

Asp Gly Gly Gly Lys Glu Glu Gly Val Ser Cys Leu Lys Ile Ser Leu
 1 5 10 15

Leu Cys Gly Pro Trp Leu Trp Leu Pro
 20 25

SUBSTITUTE SHEET (RULE 26)

<210> 413
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 413
 His Glu Met Gly Glu Leu Ala Ile Cys His Thr Arg Val Pro Phe Ser
 1 5 10 15
 Leu Pro Ser Ser Ala Gln Gly Val Pro Gln Asn Leu Gln Gly Pro Ile
 20 25 30
 Gly His Leu Ala Val Cys Thr Pro Ser Ser Leu Thr Ser Trp His Phe
 35 40 45
 Pro Gln Lys Arg Glu Lys Trp Ser Thr Val Asn Lys Arg Gln Arg Phe
 50 55 60
 Leu Gln Phe Pro Ala Pro Leu Arg Asn Trp Ile Pro Gln Thr Pro Leu
 65 70 75 80
 Ser Leu Ser Val Ser Ser Gly Pro Leu Gly Ser Phe Thr Val Phe Thr
 85 90 95
 Leu Leu Ser Leu Cys Ala Trp Pro Trp Cys Cys Arg Asp Cys Tyr Lys
 100 105 110
 Ser Cys Cys Pro Ile Pro Ile Phe Asn Leu Thr Ala Pro Leu Cys Val
 115 120 125
 His Thr Pro Glu Pro Ser Ser
 130 135

<210> 414
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 414
 Ser Ser Ala Gln Gly Val Pro Gln Asn Leu Gln Gly Pro Ile Gly His
 1 5 10 15
 Leu Ala Val Cys Thr Pro Ser
 20

<210> 415
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 415
 Val Asn Lys Arg Gln Arg Phe Leu Gln Phe Pro Ala Pro Leu Arg Asn
 1 5 10 15

SUBSTITUTE SHEET (RULE 26)

200

Trp Ile Pro Gln Thr Pro Leu Ser Leu Ser Val Ser
 20 25

<210> 416
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 416
 Cys Cys Arg Asp Cys Tyr Lys Ser Cys Cys Pro Ile Pro Ile Phe Asn
 1 5 10 15

Leu Thr Ala Pro Leu Cys Val
 20

<210> 417
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 417
 Asp Leu Asn Val Thr Asn Glu Gly Glu Gly Lys Glu Val Leu Gly Gln
 1 5 10 15

Gly Ser Thr Asn Asn Glu Lys Lys Cys Gln Lys Ala Thr Ser Asn Thr
 20 25 30

Glu Pro Arg Ala Arg Glu Ala Lys Ala Arg His Ala Asn Met Gly Thr
 35 40 45

Ser Asp Arg Glu Ser Pro Thr Trp Ser Leu Thr Ala Glu Gly Leu Lys
 50 55 60

Ala Lys Ser Lys Met Gln Gly Lys Ala Thr Lys Gly Ala Ala Ser Thr
 65 70 75 80

Met Gly Ser His Asn Gln Gly Pro His Lys Arg Glu Ile Phe Lys His
 85 90 95

Glu Thr Pro Ser Ser Phe Pro Pro Pro Ser Gln Cys Gln Pro Glu Leu
 100 105 110

Leu Pro Tyr Lys Tyr Trp Ala Thr Leu Ala Ser Gly Tyr Val Pro Ser
 115 120 125

Trp Leu Pro Ser Val Asp Ser Tyr Arg Ile Asn Thr Ala Ile Lys Asp
 130 135 140

Lys Asn Gly Gln Asp Thr
 145 150

<210> 418
 <211> 24

SUBSTITUTE SHEET (RULE 26)

201

<212> PRT

<213> Homo sapiens

<400> 418

Val Leu Gly Gln Gly Ser Thr Asn Asn Glu Lys Lys Cys Gln Lys Ala
1 5 10 15

Thr Ser Asn Thr Glu Pro Arg Ala
20

<210> 419

<211> 29

<212> PRT

<213> Homo sapiens

<400> 419

Arg Glu Ser Pro Thr Trp Ser Leu Thr Ala Glu Gly Leu Lys Ala Lys
1 5 10 15

Ser Lys Met Gln Gly Lys Ala Thr Lys Gly Ala Ala Ser
20 25

<210> 420

<211> 22

<212> PRT

<213> Homo sapiens

<400> 420

Gly Tyr Val Pro Ser Trp Leu Pro Ser Val Asp Ser Tyr Arg Ile Asn
1 5 10 15

Thr Ala Ile Lys Asp Lys
20

<210> 421

<211> 12

<212> PRT

<213> Homo sapiens

<400> 421

Asn Ser Ala Glu Gln Ser Met Leu Ile Leu Val Thr
1 5 10

<210> 422

<211> 122

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

SUBSTITUTE SHEET (RULE 26)

202

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 422

Arg	Xaa	Asp	Arg	Xaa	Pro	Val	Pro	Glu	Leu	Pro	Gly	Tyr	Glu	Pro	Thr
1				5					10					15	

Arg	Thr	Asp	Ile	Ser	Ser	Phe	Lys	Asn	Ile	Tyr	Arg	Tyr	Ala	Phe	Asp
		20						25					30		

Phe	Ala	Arg	Asp	Lys	Asp	Gln	Arg	Ser	Leu	Asp	Ile	Asp	Thr	Ala	Lys
		35					40					45			

Ser	Met	Leu	Ala	Leu	Leu	Leu	Gly	Arg	Thr	Trp	Pro	Leu	Phe	Ser	Val
	50						55				60				

Phe	Tyr	Gln	Tyr	Leu	Glu	Gln	Ser	Lys	Tyr	Arg	Val	Met	Asn	Lys	Asp
65					70					75					80

Gln	Trp	Tyr	Asn	Val	Leu	Glu	Phe	Ser	Arg	Thr	Val	His	Ala	Asp	Leu
			85						90					95	

Ser	Asn	Tyr	Asp	Glu	Asp	Gly	Ala	Trp	Pro	Val	Leu	Leu	Asp	Glu	Phe
		100						105					110		

Val	Glu	Trp	Gln	Lys	Val	Arg	Gln	Thr	Ser
	115						120		

<210> 423

<211> 28

<212> PRT

<213> Homo sapiens

<400> 423

Pro	Thr	Arg	Thr	Asp	Ile	Ser	Ser	Phe	Lys	Asn	Ile	Tyr	Arg	Tyr	Ala
1				5					10					15	

Phe	Asp	Phe	Ala	Arg	Asp	Lys	Asp	Gln	Arg	Ser	Leu
		20						25			

<210> 424

<211> 29

<212> PRT

<213> Homo sapiens

<400> 424

Ser	Met	Leu	Ala	Leu	Leu	Leu	Gly	Arg	Thr	Trp	Pro	Leu	Phe	Ser	Val
1				5					10					15	

Phe	Tyr	Gln	Tyr	Leu	Glu	Gln	Ser	Lys	Tyr	Arg	Val	Met
		20					25					

SUBSTITUTE SHEET (RULE 26)

203

<210> 425

<211> 27

<212> PRT

<213> Homo sapiens

<400> 425

Phe Ser Arg Thr Val His Ala Asp Leu Ser Asn Tyr Asp Glu Asp Gly
1 5 10 15

Ala Trp Pro Val Leu Leu Asp Glu Phe Val Glu
20 25

<210> 426

<211> 10

<212> PRT

<213> Homo sapiens

<400> 426

Ile Tyr Arg Tyr Ala Phe Asp Phe Ala Arg
1 5 10

<210> 427

<211> 8

<212> PRT

<213> Homo sapiens

<400> 427

Lys Asp Gln Arg Ser Leu Asp Ile
1 5

<210> 428

<211> 8

<212> PRT

<213> Homo sapiens

<400> 428

Asn Val Leu Glu Phe Ser Arg Thr
1 5

<210> 429

<211> 21

<212> PRT

<213> Homo sapiens

<400> 429

Asp Leu Ser Asn Tyr Asp Glu Asp Gly Ala Trp Pro Val Leu Leu Asp
1 5 10 15

Glu Phe Val Glu Trp
20

<210> 430

SUBSTITUTE SHEET (RULE 26)

<211> 37

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 430

Leu	Phe	Arg	Cys	Pro	Ile	Gly	Lys	Ala	Gly	Thr	Pro	Ala	Gly	Xaa	Gly
1				5					10					15	

Pro	Glu	Phe	Pro	Gly	Arg	Pro	Thr	Arg	Pro	Val	Arg	Glu	Lys	Glu	Leu
			20					25					30		

Thr	Glu	Thr	Phe	Glu
				35

<210> 431

<211> 21

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 431

Gly	Lys	Ala	Gly	Thr	Pro	Ala	Gly	Xaa	Gly	Pro	Glu	Phe	Pro	Gly	Arg
1				5					10					15	

Pro	Thr	Arg	Pro	Val
				20

<210> 432

<211> 45

<212> PRT

<213> Homo sapiens

<400> 432

Phe	Phe	Val	Phe	Pro	Tyr	Pro	Tyr	Pro	Phe	Arg	Pro	Leu	Pro	Pro	Ile
1				5					10					15	

Pro	Phe	Pro	Arg	Phe	Pro	Trp	Phe	Arg	Arg	Asn	Phe	Pro	Ile	Pro	Ile
			20					25					30		

Pro	Glu	Ser	Ala	Pro	Thr	Thr	Pro	Leu	Pro	Ser	Glu	Lys
		35					40					45

<210> 433

<211> 21

<212> PRT

SUBSTITUTE SHEET (RULE 26)

205

<213> Homo sapiens

<400> 433

Pro Trp Phe Arg Arg Asn Phe Pro Ile Pro Ile Pro Glu Ser Ala Pro
 1 5 10 15

Thr Thr Pro Leu Pro
 20

<210> 434

<211> 61

<212> PRT

<213> Homo sapiens

<400> 434

Phe Tyr Pro Pro Met Thr Gln Gly Lys Glu Ser Leu Pro Leu Leu Ala
 1 5 10 15

Leu Gln Ile Phe Asn Thr Thr Phe Arg Pro Ser Phe Ala Phe Phe Ser
 20 25 30

Gly His Arg Thr Leu Phe Phe Gly Val Arg Ser Pro Asn Pro Pro Lys
 35 40 45

Pro Arg Ile Phe Leu Ile Trp Leu Ile Ala Val Ala Leu
 50 55 60

<210> 435

<211> 31

<212> PRT

<213> Homo sapiens

<400> 435

Leu Leu Ala Leu Gln Ile Phe Asn Thr Thr Phe Arg Pro Ser Phe Ala
 1 5 10 15

Phe Phe Ser Gly His Arg Thr Leu Phe Phe Gly Val Arg Ser Pro
 20 25 30

<210> 436

<211> 52

<212> PRT

<213> Homo sapiens

<400> 436

His Leu Ala Gln Thr Val Met Met His Pro Gln Lys Ser Phe Tyr Gln
 1 5 10 15

Val Lys Asn Thr Asn His Ser Asp Arg Gly Ala Ile Glu Glu Thr Gln
 20 25 30

Ile Leu Glu Asp Arg Leu Gly Gln Ile Pro Leu Cys Leu Glu Ser Gln
 35 40 45

SUBSTITUTE SHEET (RULE 26)

206

Ile Trp Glu Ala
50

<210> 437
<211> 28
<212> PRT
<213> Homo sapiens

<400> 437
Lys Asn Thr Asn His Ser Asp Arg Gly Ala Ile Glu Glu Thr Gln Ile
1 5 10 15
Leu Glu Asp Arg Leu Gly Gln Ile Pro Leu Cys Leu
20 25

<210> 438
<211> 73
<212> PRT
<213> Homo sapiens

<400> 438
Gln Gly Cys Tyr Arg Arg Asp Ser Asn Ile Gly Arg Gln Val Arg Pro
1 5 10 15
Asp Ser Ile Met Leu Arg Lys Pro Asp Leu Gly Ser Ile Thr His Tyr
20 25 30
Gly Ser Val Leu Gly Asn Leu Asn Tyr Cys Asp Leu Pro Gln Leu Tyr
35 40 45
Arg Asn Pro Ser Leu Gly Asn Ser Gly Met Arg Glu Met Phe Ser Pro
50 55 60
Phe Tyr Asn Pro Val Glu Cys His Pro
65 70

<210> 439
<211> 23
<212> PRT
<213> Homo sapiens

<400> 439
Pro Asp Ser Ile Met Leu Arg Lys Pro Asp Leu Gly Ser Ile Thr His
1 5 10 15
Tyr Gly Ser Val Leu Gly Asn
20

<210> 440
<211> 22
<212> PRT
<213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

207

<400> 440

Tyr Arg Asn Pro Ser Leu Gly Asn Ser Gly Met Arg Glu Met Phe Ser
 1 5 10 15

Pro Phe Tyr Asn Pro Val
 20

<210> 441

<211> 21

<212> PRT

<213> Homo sapiens

<400> 441

Asn Ser Ala Arg Gly Leu Ser Gly Gly His Pro Phe Pro Trp Leu Ser
 1 5 10 15

Glu Gly His Pro Phe
 20

<210> 442

<211> 107

<212> PRT

<213> Homo sapiens

<400> 442

Thr Asp Ser Asp Leu Thr Leu Gly Ile Leu Leu Leu Gly Ile Tyr Thr
 1 5 10 15

Asn His Ile Trp Glu Met Phe Leu Ala Ala Ser Arg Ile Asn Ser Pro
 20 25 30

Lys Leu Glu Pro Glu Lys Ser Val Lys Arg Gln Ile Asn Phe Pro Ser
 35 40 45

Ser Lys Asp Val Gly Cys Ser Leu Glu Val Pro Lys Asp Gly Pro Pro
 50 55 60

Leu Ser His Gly Lys Glu Trp Ile Pro Leu Ser His Arg Lys Gly Trp
 65 70 75 80

Ile Pro Leu Ser His Met Lys Gly Trp Pro Ser Leu Ser His Gly Lys
 85 90 95

Gly Trp Pro Pro Leu Ser Pro Arg Ala Glu Phe
 100 105

<210> 443

<211> 20

<212> PRT

<213> Homo sapiens

<400> 443

Leu Gly Ile Leu Leu Leu Gly Ile Tyr Thr Asn His Ile Trp Glu Met
 1 5 10 15

SUBSTITUTE SHEET (RULE 26)

Phe Leu Ala Ala
20

<210> 444
<211> 27
<212> PRT
<213> Homo sapiens

<400> 444
Lys Ser Val Lys Arg Gln Ile Asn Phe Pro Ser Ser Lys Asp Val Gly
1 5 10 15

Cys Ser Leu Glu Val Pro Lys Asp Gly Pro Pro
20 25

<210> 445
<211> 27
<212> PRT
<213> Homo sapiens

<400> 445
Gly Lys Glu Trp Ile Pro Leu Ser His Arg Lys Gly Trp Ile Pro Leu
1 5 10 15

Ser His Met Lys Gly Trp Pro Ser Leu Ser His
20 25

<210> 446
<211> 47
<212> PRT
<213> Homo sapiens

<400> 446
Gly Trp Ala Ser Thr Gln Pro Arg Glu Arg Met Asp Pro Ala Gln Pro
1 5 10 15

Gln Glu Arg Met Asp Pro Ser Gln Pro His Glu Arg Met Ala Leu Thr
20 25 30

Gln Pro Trp Lys Arg Met Ala Pro Thr Gln Pro Ser Cys Arg Ile
35 40 45

<210> 447
<211> 24
<212> PRT
<213> Homo sapiens

<400> 447
Pro Ala Gln Pro Gln Glu Arg Met Asp Pro Ser Gln Pro His Glu Arg
1 5 10 15

Met Ala Leu Thr Gln Pro Trp Lys

SUBSTITUTE SHEET (RULE 26)

20

<210> 448
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 448
 Ile Ala Asn Gly Gly Gly Arg Pro Ile Lys Leu Asn Ala Leu Tyr Lys
 1 5 10 15
 Ile Gln Asn Glu Cys Lys Ile Val Phe Thr Cys Ile Asp Phe
 20 25 30

<210> 449
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 449
 Met Pro Cys Ile Lys Ser Lys Met Asn Ala Lys Leu Phe Ser Leu Val
 1 5 10 15
 Leu Thr Leu Cys Cys Met Ile Pro Ile Ser Val Leu Phe Gly Thr Cys
 20 25 30

Ile

<210> 450
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 450
 Gln Val Ala Met Gly Ser Leu Ser Gly Leu Arg Leu Ala Ala Gly Ser
 1 5 10 15
 Cys Phe Arg Leu Cys Glu Arg Asp Val Ser Ser Ser Leu Arg Leu Thr
 20 25 30
 Arg Ser Ser Asp Leu Lys Arg Ile Asn Gly Phe Cys Thr Lys Pro Gln
 35 40 45
 Glu Ser Pro Gly Ala Pro Ser Arg Thr Tyr Asn Arg Val Pro Leu His
 50 55 60
 Lys Pro Thr Asp Trp Gln Lys Lys Ile Leu Ile Trp Ser Gly Arg Phe
 65 70 75 80
 Lys Lys Glu Asp Glu Ile Pro Glu Thr Val Ser Leu Glu Met Leu Asp
 85 90 95
 Ala Ala Lys Asn Lys

SUBSTITUTE SHEET (RULE 26)

210

100

<210> 451
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 451
 Gly Leu Arg Leu Ala Ala Gly Ser Cys Phe Arg Leu Cys Glu Arg Asp
 1 5 10 15

Val Ser Ser Ser Leu Arg Leu Thr Arg
 20 25

<210> 452
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 452
 Ala Pro Ser Arg Thr Tyr Asn Arg Val Pro Leu His Lys Pro Thr Asp
 1 5 10 15

Trp Gln Lys Lys
 20

<210> 453
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 453
 Ile Trp Ser Gly Arg Phe Lys Lys Glu Asp Glu Ile Pro Glu Thr Val
 1 5 10 15

Ser Leu Glu Met Leu Asp Ala
 20

<210> 454
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 454
 Met Asp Phe Ala Gln Asn His Arg Lys Val Pro Glu Leu His Pro Ala
 1 5 10 15

Leu Thr Thr Glu Cys Leu Tyr Thr Asn Leu Arg Ile Gly Arg Lys Arg
 20 25 30

Ser Ser Tyr Gly Gln Val Ala Ser Lys Arg Lys Met Lys Ser Gln Arg
 35 40 45

SUBSTITUTE SHEET (RULE 26)

211

Leu Ser Arg Trp Arg Cys Leu Met Leu Gln Arg Thr Arg Cys Glu
 50 55 60

<210> 455

<211> 19

<212> PRT

<213> Homo sapiens

<400> 455

Lys Val Pro Glu Leu His Pro Ala Leu Thr Thr Glu Cys Leu Tyr Thr
 1 5 10 15

Asn Leu Arg

<210> 456

<211> 26

<212> PRT

<213> Homo sapiens

<400> 456

Lys Arg Ser Ser Tyr Gly Gln Val Ala Ser Lys Arg Lys Met Lys Ser
 1 5 10 15

Gln Arg Leu Ser Arg Trp Arg Cys Leu Met
 20 25

<210> 457

<211> 12

<212> PRT

<213> Homo sapiens

<400> 457

Ile Asn Gly Phe Cys Thr Lys Pro Gln Glu Ser Pro
 1 5 10

<210> 458

<211> 9

<212> PRT

<213> Homo sapiens

<400> 458

Arg Val Pro Leu His Lys Pro Thr Asp
 1 5

<210> 459

<211> 8

<212> PRT

<213> Homo sapiens

<400> 459

Trp Ser Gly Arg Phe Lys Lys Glu

SUBSTITUTE SHEET (RULE 26)

1

5

<210> 460

<211> 9

<212> PRT

<213> Homo sapiens

<400> 460

Glu Met Leu Asp Ala Ala Lys Asn Lys

1

5

<210> 461

<211> 9

<212> PRT

<213> Homo sapiens

<400> 461

Ser Tyr Leu Met Ile Ala Leu Thr Val

1

5

<210> 462

<211> 9

<212> PRT

<213> Homo sapiens

<400> 462

Met Val Ile Glu Gly Lys Lys Ala Ala

1

5

<210> 463

<211> 68

<212> PRT

<213> Homo sapiens

<400> 463

Arg Pro Gly Met Arg Ala Leu Gly Ser Cys Leu Ser Leu Leu Ala Leu

1

5

10

15

Cys Ser Pro Gln Ala Arg Pro Gly Pro Arg Thr Leu Asp Ala Ser Thr

20

25

30

Ala Thr Leu Thr Pro His Phe Ser Pro Cys Ala Arg Phe Ser Pro Val

35

40

45

Gly Pro Ser Ala Val Pro Phe Ala Ala Thr Pro Leu Pro Leu Ala Gly

50

55

60

Pro His Gln Pro

65

<210> 464

<211> 20..

SUBSTITUTE SHEET (RULE 26)

213

<212> PRT

<213> Homo sapiens

<400> 464

Gly Ser Cys Leu Ser Leu Leu Ala Leu Cys Ser Pro Gln Ala Arg Pro
 1 5 10 15

Gly Pro Arg Thr
 20

<210> 465

<211> 23

<212> PRT

<213> Homo sapiens

<400> 465

His Phe Ser Pro Cys Ala Arg Phe Ser Pro Val Gly Pro Ser Ala Val
 1 5 10 15

Pro Phe Ala Ala Thr Pro Leu
 20

<210> 466

<211> 92

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (80)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 466

Ala Ile Glu Glu Arg Asn Lys Ser Arg Leu Thr Gln Gln Ala Ser Glu
 1 5 10 15

Pro Thr Gly Ser Pro Arg Tyr Leu His Glu Gln His Pro Gly Ser Arg
 20 25 30

Ser Gln Met Asp Cys Gly Ser Leu Thr Met Xaa Cys Pro Pro Pro Arg
 35 40 45

Val Arg Asp Asp Arg Thr Ser Ala Arg Gly Val Pro Arg Gln Ala Ala
 50 55 60

Pro Asp Ile Val Gly Gly Arg Pro Ser Ser Arg Ala Cys Val Ser Xaa
 65 70 75 80

Pro Ala Cys Ala Pro Ser Ala Ala Val Phe Pro Tyr
 85 90

SUBSTITUTE SHEET (RULE 26)

<210> 467
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 467
 Leu Thr Gln Gln Ala Ser Glu Pro Thr Gly Ser Pro Arg Tyr Leu His
 1 5 10 15
 Glu Gln His Pro Gly Ser Arg Ser
 20

<210> 468
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 468
 Ser Ala Arg Gly Val Pro Arg Gln Ala Ala Pro Asp Ile Val Gly Gly
 1 5 10 15
 Arg Pro Ser Ser Arg Ala Cys Val Ser
 20 25

<210> 469
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 469
 Pro Arg Val Arg Lys Thr Pro His Leu Ser Ala Ser Gly Lys
 1 5 10

<210> 470
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 470
 Tyr Tyr Tyr Ser Met Leu Lys Ile Cys His Ile Thr Ile Leu Glu Thr
 1 5 10 15
 Leu Ser Asp Arg Thr Pro Arg Lys Phe Ala Lys Lys Cys Tyr Ile Leu
 20 25 30
 Tyr Ile Lys Leu Ser Asp Ser Ser Val Glu Lys Val Ala Tyr Thr Leu
 35 40 45
 Leu Leu Leu Ile Pro Ala Ala Ile Glu Lys Lys
 50 55

SUBSTITUTE SHEET (RULE 26)

215

<210> 471
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 471
 Thr Ile Leu Glu Thr Leu Ser Asp Arg Thr Pro Arg Lys Phe Ala Lys
 1 5 10 15
 Lys Cys Tyr Ile Leu Tyr Ile Lys Leu Ser Asp Ser Ser Val Glu Lys
 20 25 30

<210> 472
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 472
 Val His Thr Lys Glu Ile Phe Arg Glu Arg Ser Ala Gly Phe Pro Val
 1 5 10 15
 Lys

<210> 473
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 473
 Leu Glu Met Gly Phe Gln Pro Thr Lys Glu Ile Asn Ala Arg Gly Ser
 1 5 10 15
 Glu Pro Cys Gln Ala Gln Ser Thr Ser Leu Pro Lys Leu Pro Arg Trp
 20 25 30
 Gly Ser Arg Pro Glu Ala Pro Gln Thr Pro Gln Gly Gly Leu Glu Ser
 35 40 45
 Arg Cys Cys Thr Pro Val Ser Lys Gln Ser Leu Asn Leu Lys Ala Asp
 50 55 60
 Arg Phe Lys Ala Leu Thr Leu Gly Arg Ala Gln Trp Leu Thr Pro Val
 65 70 75 80
 Ile Gln Ala Leu Ser Glu Leu Arg Trp Val Asp His Leu Arg Ser Gly
 85 90 95
 Val

SUBSTITUTE SHEET (RULE 26)

216

<210> 474

<211> 24

<212> PRT

<213> Homo sapiens

<400> 474

Phe Gln Pro Thr Lys Glu Ile Asn Ala Arg Gly Ser Glu Pro Cys Gln
 1 5 10 15

Ala Gln Ser Thr Ser Leu Pro Lys
 20

<210> 475

<211> 27

<212> PRT

<213> Homo sapiens

<400> 475

Pro Lys Leu Pro Arg Trp Gly Ser Arg Pro Glu Ala Pro Gln Thr Pro
 1 5 10 15

Gln Gly Gly Leu Glu Ser Arg Cys Cys Thr Pro
 20 25

<210> 476

<211> 27

<212> PRT

<213> Homo sapiens

<400> 476

Arg Phe Lys Ala Leu Thr Leu Gly Arg Ala Gln Trp Leu Thr Pro Val
 1 5 10 15

Ile Gln Ala Leu Ser Glu Leu Arg Trp Val Asp
 20 25

<210> 477

<211> 176

<212> PRT

<213> Homo sapiens

<400> 477

Arg Ile Pro Leu Gln Ser Asp Gly Ser Phe Leu His Glu Lys Ser Ser
 1 5 10 15

Gln Gln Arg Ser Asn Arg Asn Phe Pro Cys Pro Thr Leu Gln Cys Asn
 20 25 30

Pro Glu Val Ser Phe Trp Phe Val Val Thr Asp Pro Ser Lys Asn His
 35 40 45

Thr Leu Pro Ala Val Glu Val Gln Ser Ala Ile Arg Met Asn Lys Asn
 50 55 60

SUBSTITUTE SHEET (RULE 26)

217

Arg Ile Asn Asn Ala Phe Phe Leu Asn Asp Gln Thr Leu Glu Phe Leu
 65 70 75 80
 Lys Ile Pro Ser Thr Leu Ala Pro Pro Met Asp Pro Ser Val Pro Ile
 85 90 95
 Trp Ile Ile Ile Phe Gly Val Ile Phe Cys Ile Ile Ile Val Ala Ile
 100 105 110
 Ala Leu Leu Ile Leu Ser Gly Ile Trp Gln Arg Arg Arg Lys Asn Lys
 115 120 125
 Glu Pro Ser Glu Val Asp Asp Ala Glu Asp Lys Cys Glu Asn Met Ile
 130 135 140
 Thr Ile Glu Asn Gly Ile Pro Ser Asp Pro Leu Asp Met Lys Gly Gly
 145 150 155 160
 His Ile Asn Asp Ala Phe Met Thr Glu Asp Glu Arg Leu Thr Pro Leu
 165 170 175

<210> 478

<211> 25

<212> PRT

<213> Homo sapiens

<400> 478

Pro Cys Pro Thr Leu Gln Cys Asn Pro Glu Val Ser Phe Trp Phe Val
 1 5 10 15

Val Thr Asp Pro Ser Lys Asn His Thr
 20 25

<210> 479

<211> 23

<212> PRT

<213> Homo sapiens

<400> 479

Ala Ile Arg Met Asn Lys Asn Arg Ile Asn Asn Ala Phe Phe Leu Asn
 1 5 10 15

Asp Gln Thr Leu Glu Phe Leu
 20

<210> 480

<211> 24

<212> PRT

<213> Homo sapiens

<400> 480

SUBSTITUTE SHEET (RULE 26)

218

Ile Trp Gln Arg Arg Arg Lys Asn Lys Glu Pro Ser Glu Val Asp Asp
 1 5 10 15

Ala Glu Asp Lys Cys Glu Asn Met
 20

<210> 481

<211> 19

<212> PRT

<213> Homo sapiens

<400> 481

Pro Leu Asp Met Lys Gly Gly His Ile Asn Asp Ala Phe Met Thr Glu
 1 5 10 15

Asp Glu Arg

<210> 482

<211> 136

<212> PRT

<213> Homo sapiens

<400> 482

Gly Ser Arg Thr Thr Ala Leu Gln Arg Gly Val Ser Leu Ser Ser Ser
 1 5 10 15

Val Met Lys Ala Ser Leu Ile Cys Pro Pro Phe Met Ser Arg Gly Ser
 20 25 30

Glu Gly Met Pro Phe Ser Ile Val Ile Met Phe Ser His Leu Ser Ser
 35 40 45

Ala Ser Ser Thr Ser Asp Gly Ser Leu Phe Phe Leu Leu Arg Cys Gln
 50 55 60

Ile Pro Asp Lys Ile Ser Ser Ala Ile Ala Thr Met Met Met Gln Asn
 65 70 75 80

Ile Thr Pro Asn Ile Ile Ile Gln Met Gly Thr Asp Gly Ser Met Gly
 85 90 95

Gly Ala Ser Val Glu Gly Ile Phe Lys Asn Ser Arg Val Trp Ser Phe
 100 105 110

Arg Lys Lys Ala Leu Leu Ile Arg Phe Leu Phe Ile Leu Met Ala Asp
 115 120 125

Cys Thr Ser Thr Ala Gly Arg Val
 130 135

<210> 483

<211> 28

<212> PRT

SUBSTITUTE SHEET (RULE 26)

219

<213> Homo sapiens

<400> 483

Val Ser Leu Ser Ser Ser Val Met Lys Ala Ser Leu Ile Cys Pro Pro
 1 5 10 15

Phe Met Ser Arg Gly Ser Glu Gly Met Pro Phe Ser
 20 25

<210> 484

<211> 24

<212> PRT

<213> Homo sapiens

<400> 484

Ser Met Gly Gly Ala Ser Val Glu Gly Ile Phe Lys Asn Ser Arg Val
 1 5 10 15

Trp Ser Phe Arg Lys Lys Ala Leu
 20

<210> 485

<211> 29

<212> PRT

<213> Homo sapiens

<400> 485

Gly Ala Arg Gly Ser Gln Gln Asp Ala Pro Ala Leu Gln Glu Ala Glu
 1 5 10 15

Val Arg Gly Pro Glu Arg Ala Gln Pro Ala Arg Gly Arg
 20 25

<210> 486

<211> 439

<212> PRT

<213> Homo sapiens

<400> 486

Ser Glu Arg Pro Gly Glu Gly Pro Ala Arg Pro Gly Gln Asp Asp Gln
 1 5 10 15

Gly Pro Ala Val Pro Ala Val Ala Gly Ala Gly Val Gly Val His Asp
 20 25 30

Pro Ala Asp His Arg Val Leu Gly Gln Arg Ser Ala Ala His Phe Tyr
 35 40 45

Leu His Thr Ser Phe Ser Arg Pro His Thr Gly Pro Pro Leu Pro Thr
 50 55 60

Pro Gly Pro Asp Arg Thr Gly Ser Ser Arg Pro Thr Pro Met Ser Thr
 65 70 75 80

SUBSTITUTE SHEET (RULE 26)

220

Ser Phe Trp Thr Ile Ser His Ala Gly Val Lys Gln Ser Asp Leu Pro
85 90 95

Arg Lys Glu Thr Glu Gln Pro Pro Ala Pro Gly Glu His Gly Gly Glu
100 105 110

Arg Glu Arg Leu Arg Leu Val Pro Ala Arg Arg Pro Ala Gln Pro Arg
115 120 125

Pro Gly Pro Ala Ala Gly Gly Ala Glu Glu Arg Ala Ala Gly Leu Leu
130 135 140

Arg Gln Leu Gln Pro Gly Leu Pro His Gln Gly Ala Arg Ile Arg Arg
145 150 155 160

His Pro Gln Leu Gly Ala Glu Pro Pro Asp Arg Gly Arg Pro Ala Arg
165 170 175

Gly His Leu Leu Leu Arg Ala Gln Gly Gly Leu His Gln Leu Glu Ala
180 185 190

Arg Asp Asp Arg Ala Glu Arg Lys Pro Ala Ala Pro Arg Cys Ala Leu
195 200 205

Pro Arg Pro Ala Ala His Pro Ala Arg Ala Arg Ala Gln Arg Gln Arg
210 215 220

Ala Pro Asp Leu Gln Gln Val Leu Ala Pro Leu Arg Glu Ala Leu Pro
225 230 235 240

Pro Pro His Glu Gly Gln Ala Gln Glu Val His Gln Val Pro Leu Arg
245 250 255

Ala Arg Pro Leu Arg Ala Pro Asp Leu Arg Leu Pro Gln Gln Val Arg
260 265 270

Ala Gly Glu Arg Gly Val Leu Pro Gln Val Arg Arg Ala His Ala Ala
275 280 285

Gly Val Arg Gln Pro His Gln Pro Ala Arg Leu Gly Ala Arg Gly Leu
290 295 300

Pro Arg Trp Pro Gln Gly Val Leu Arg Gln Leu His Pro Val Pro Ala
305 310 315 320

Gly Pro Ala His Gly Glu Ala Gly Ala Leu Gln Arg Ala Leu Ala Ala
325 330 335

Gly Val Pro Pro Leu Pro Pro Val Pro Asp Arg Leu Arg Phe Leu Gly
340 345 350

Lys Leu Glu Thr Leu Asp Glu Asp Ala Ala Gln Leu Leu Gln Leu Leu
355 360 365

Gln Val Asp Arg Gln Ser Ala Ser Pro Arg Ala Thr Gly Thr Gly Pro
370 375 380

SUBSTITUTE SHEET (RULE 26)

221

Pro Ala Ala Gly Arg Arg Thr Gly Ser Pro Arg Ser Pro Trp Pro Gly
 385 390 395 400

Gly Ser Ser Cys Ile Asn Ser Thr Arg Pro Thr Leu Phe Ser Ser Ala
 405 410 415

Thr Pro Ser Pro Lys Thr Ser Ser Glu Thr Glu Ser Phe Arg Val Ala
 420 425 430

Phe Ser Arg Val Pro Gly Thr
 435

<210> 487

<211> 25

<212> PRT

<213> Homo sapiens

<400> 487

Arg Pro Gly Gln Asp Asp Gln Gly Pro Ala Val Pro Ala Val Ala Gly
 1 5 10 15

Ala Gly Val Gly Val His Asp Pro Ala
 20 25

<210> 488

<211> 21

<212> PRT

<213> Homo sapiens

<400> 488

Ser Arg Pro His Thr Gly Pro Pro Leu Pro Thr Pro Gly Pro Asp Arg
 1 5 10 15

Thr Gly Ser Ser Arg
 20

<210> 489

<211> 23

<212> PRT

<213> Homo sapiens

<400> 489

Ser His Ala Gly Val Lys Gln Ser Asp Leu Pro Arg Lys Glu Thr Glu
 1 5 10 15

Gln Pro Pro Ala Pro Gly Glu
 20

<210> 490

<211> 23

<212> PRT

<213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

222

<400> 490

Arg Arg Pro Ala Gln Pro Arg Pro Gly Pro Ala Ala Gly Gly Ala Glu
 1 5 10 15

Glu Arg Ala Ala Gly Leu Leu
 20

<210> 491

<211> 23

<212> PRT

<213> Homo sapiens

<400> 491

Arg Arg His Pro Gln Leu Gly Ala Glu Pro Pro Asp Arg Gly Arg Pro
 1 5 10 15

Ala Arg Gly His Leu Leu Leu
 20

<210> 492

<211> 25

<212> PRT

<213> Homo sapiens

<400> 492

Arg Asp Asp Arg Ala Glu Arg Lys Pro Ala Ala Pro Arg Cys Ala Leu
 1 5 10 15

Pro Arg Pro Ala Ala His Pro Ala Arg
 20 25

<210> 493

<211> 27

<212> PRT

<213> Homo sapiens

<400> 493

Arg Ala Pro Asp Leu Gln Gln Val Leu Ala Pro Leu Arg Glu Ala Leu
 1 5 10 15

Pro Pro Pro His Glu Gly Gln Ala Gln Glu Val
 20 25

<210> 494

<211> 26

<212> PRT

<213> Homo sapiens

<400> 494

Asp Leu Arg Leu Pro Gln Gln Val Arg Ala Gly Glu Arg Gly Val Leu
 1 5 10 15

Pro Gln Val Arg Arg Ala His Ala Ala Gly

SUBSTITUTE SHEET (RULE 26)

223

20

25

<210> 495
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 495
 Gln Pro Ala Arg Leu Gly Ala Arg Gly Leu Pro Arg Trp Pro Gln Gly
 1 5 10 15
 Val Leu Arg Gln Leu His Pro Val Pro Ala Gly
 20 25

<210> 496
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 496
 Ala Gly Val Pro Pro Leu Pro Pro Val Pro Asp Arg Leu Arg Phe Leu
 1 5 10 15
 Gly Lys Leu Glu Thr Leu Asp Glu
 20

<210> 497
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 497
 Gln Leu Leu Gln Leu Leu Gln Val Asp Arg Gln Ser Ala Ser Pro Arg
 1 5 10 15
 Ala Thr Gly Thr Gly Pro Pro Ala Ala
 20 25

<210> 498
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 498
 Asn Ser Thr Arg Pro Thr Leu Phe Ser Ser Ala Thr Pro Ser Pro Lys
 1 5 10 15
 Thr Ser Ser Glu Thr Glu Ser Phe Arg
 20 25

<210> 499
 <211> 324

SUBSTITUTE SHEET (RULE 26)

<212> PRT

<213> Homo sapiens

<400> 499

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Leu Gly Gly Lys Arg Thr Ala Gly Pro Pro Gly Val Ala Ala Ala Ala
 1           5           10           15

Ala Arg Arg Pro Arg Pro Glu Ser Pro Ala Ser Pro Gly Ile Val Val
          20           25           30

Asp Leu Ala Arg Val Ala Glu Ala Val His Leu Pro Pro Val Leu Val
          35           40           45

Glu Gly Arg Gln Leu Leu Arg Val Arg Val Gln Gln Val Leu Asp Glu
          50           55           60

Val Gly Glu Gly His Leu Glu Ala Ser Ala Glu Gly Leu Ala Arg Arg
          65           70           75           80

Gly Gly Gln Ala Gly Val Val Gly Val His Pro Gln His Gly His Gly
          85           90           95

Glu Leu Ala Val Glu Leu Leu Val Leu Gln Leu Glu Leu Ala Ala Glu
          100          105          110

Gly Gly Asp Gln Ala His Glu Gly Val Ala His Glu Glu Glu Leu Gly
          115          120          125

Val Leu Leu Glu Leu Asp Leu His Glu Val Ala Gly Glu Leu Pro Val
          130          135          140

Ala Ala Pro Glu Leu Val Glu Gly Gln Val Arg Ala Gly Val Val His
          145          150          155          160

Val Leu Ala Arg Asp Ala Gln Arg Val Ala Val Gly Arg Thr Ala Val
          165          170          175

Gln Gln Ala Ser Ala Gln His Asp His His Ala Leu Pro Val Gly Ala
          180          185          190

Gly His Leu Gly His Val Ala Val Asp Gly Pro Val Pro Val Val His
          195          200          205

Asp Gln Val Ala Gln Leu Arg Val Gly Asp Val Val Glu Cys Ala Leu
          210          215          220

Leu Gly Gly Glu Gly Gln Ala Gly Val Gly Ala Glu Ala Pro Gln His
          225          230          235          240

Val Pro Pro Leu Arg Leu Leu Pro Ala Leu Val Trp Ala Ala Pro Gly
          245          250          255

Val Ala Arg Gly Pro Val Val Ala Ser His Ala Leu Leu His Ala Pro
          260          265          270

Pro Ala Gln Ala Ala Ala Pro Ser Pro Phe Trp Glu Gly His Ser Ala
          275          280          285

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SUBSTITUTE SHEET (RULE 26)

225

Ser Arg Gln His Glu Lys Leu Ser Arg Asn Ser Ser Thr Ser Glu Ser
 290 295 300

Ala Val Ser Ser Leu Ser Cys Pro Ala Arg Ala Trp Ala Ala Ala Ala
 305 310 315 320

Pro Cys Ala Ala

<210> 500

<211> 23

<212> PRT

<213> Homo sapiens

<400> 500

Glu Ala Val His Leu Pro Pro Val Leu Val Glu Gly Arg Gln Leu Leu
 1 5 10 15

Arg Val Arg Val Gln Gln Val
 20

<210> 501

<211> 24

<212> PRT

<213> Homo sapiens

<400> 501

Gly His Leu Glu Ala Ser Ala Glu Gly Leu Ala Arg Arg Gly Gly Gln
 1 5 10 15

Ala Gly Val Val Gly Val His Pro
 20

<210> 502

<211> 28

<212> PRT

<213> Homo sapiens

<400> 502

Gln Leu Glu Leu Ala Ala Glu Gly Gly Asp Gln Ala His Glu Gly Val
 1 5 10 15

Ala His Glu Glu Glu Leu Gly Val Leu Leu Glu Leu
 20 25

<210> 503

<211> 27

<212> PRT

<213> Homo sapiens

<400> 503

Gly Glu Leu Pro Val Ala Ala Pro Glu Leu Val Glu Gly Gln Val Arg

SUBSTITUTE SHEET (RULE 26)

226

1 5 10 15

Ala Gly Val Val His Val Leu Ala Arg Asp Ala
20 25

<210> 504
<211> 25
<212> PRT
<213> Homo sapiens

<400> 504
Ala Val Gln Gln Ala Ser Ala Gln His Asp His His Ala Leu Pro Val
1 5 10 15

Gly Ala Gly His Leu Gly His Val Ala
20 25

<210> 505
<211> 25
<212> PRT
<213> Homo sapiens

<400> 505
His Asp Gln Val Ala Gln Leu Arg Val Gly Asp Val Val Glu Cys Ala
1 5 10 15

Leu Leu Gly Gly Glu Gly Gln Ala Gly
20 25

<210> 506
<211> 23
<212> PRT
<213> Homo sapiens

<400> 506
Ala Leu Val Trp Ala Ala Pro Gly Val Ala Arg Gly Pro Val Val Ala
1 5 10 15

Ser His Ala Leu Leu His Ala
20

<210> 507
<211> 28
<212> PRT
<213> Homo sapiens

<400> 507
Pro Pro Ala Gln Ala Ala Ala Pro Ser Pro Phe Trp Glu Gly His Ser
1 5 10 15

Ala Ser Arg Gln His Glu Lys Leu Ser Arg Asn Ser
20 25

SUBSTITUTE SHEET (RULE 26)

<210> 508

<211> 314

<212> PRT

<213> Homo sapiens

<400> 508

Ser Arg Val Thr Phe Pro Glu Arg Arg Arg Ser Ser Arg Leu Arg Arg
 1 5 10 15

Gly Ser Met Glu Glu Ser Val Arg Gly Tyr Asp Trp Ser Pro Arg Asp
 20 25 30

Ala Arg Arg Ser Pro Asp Gln Gly Arg Gln Gln Ala Glu Arg Arg Asn
 35 40 45

Val Leu Arg Gly Phe Cys Ala Asn Ser Ser Leu Ala Phe Pro Thr Lys
 50 55 60

Glu Arg Ala Phe Asp Asp Ile Pro Asn Ser Glu Leu Ser His Leu Ile
 65 70 75 80

Val Asp Asp Arg His Gly Ala Ile Tyr Cys Tyr Val Pro Lys Val Ala
 85 90 95

Cys Thr Asn Trp Lys Arg Val Met Ile Val Leu Ser Gly Ser Leu Leu
 100 105 110

His Arg Gly Ala Pro Tyr Arg Asp Pro Leu Arg Ile Pro Arg Glu His
 115 120 125

Val His Asn Ala Ser Ala His Leu Thr Phe Asn Lys Phe Trp Arg Arg
 130 135 140

Tyr Gly Lys Leu Ser Arg His Leu Met Lys Val Lys Leu Lys Lys Tyr
 145 150 155 160

Thr Lys Phe Leu Phe Val Arg Asp Pro Phe Val Arg Leu Ile Ser Ala
 165 170 175

Phe Arg Ser Lys Phe Glu Leu Glu Asn Glu Glu Phe Tyr Arg Lys Phe
 180 185 190

Ala Val Pro Met Leu Arg Val Tyr Ala Asn His Thr Ser Leu Pro Ala
 195 200 205

Ser Ala Arg Glu Ala Phe Arg Ala Gly Leu Lys Val Ser Phe Ala Asn
 210 215 220

Phe Ile Gln Tyr Leu Leu Asp Pro His Thr Glu Lys Leu Ala Pro Phe
 225 230 235 240

Asn Glu His Trp Arg Gln Val Tyr Arg Leu Cys His Pro Cys Gln Ile
 245 250 255

Asp Tyr Asp Ser Trp Gly Ser Trp Arg Leu Trp Thr Arg Thr Pro Arg
 260 265 270

SUBSTITUTE SHEET (RULE 26)

228

Ser Cys Cys Ser Tyr Ser Arg Trp Thr Gly Ser Pro Leu Pro Pro Glu
 275 280 285

Leu Pro Glu Gln Asp Arg Gln Gln Leu Gly Gly Gly Leu Val Arg Gln
 290 295 300

Asp Pro Pro Gly Leu Glu Ala Ala Ala Val
 305 310

<210> 509

<211> 26

<212> PRT

<213> Homo sapiens

<400> 509

Arg Ser Pro Asp Gln Gly Arg Gln Gln Ala Glu Arg Arg Asn Val Leu
 1 5 10 15

Arg Gly Phe Cys Ala Asn Ser Ser Leu Ala
 20 25

<210> 510

<211> 28

<212> PRT

<213> Homo sapiens

<400> 510

Thr Lys Glu Arg Ala Phe Asp Asp Ile Pro Asn Ser Glu Leu Ser His
 1 5 10 15

Leu Ile Val Asp Asp Arg His Gly Ala Ile Tyr Cys
 20 25

<210> 511

<211> 23

<212> PRT

<213> Homo sapiens

<400> 511

Phe Asn Lys Phe Trp Arg Arg Tyr Gly Lys Leu Ser Arg His Leu Met
 1 5 10 15

Lys Val Lys Leu Lys Lys Tyr
 20

<210> 512

<211> 24

<212> PRT

<213> Homo sapiens

<400> 512

Phe Val Arg Leu Ile Ser Ala Phe Arg Ser Lys Phe Glu Leu Glu Asn

SUBSTITUTE SHEET (RULE 26)

1 5 229 10 15
 Glu Glu Phe Tyr Arg Lys Phe Ala
 20
 <210> 513
 <211> 26
 <212> PRT
 <213> Homo sapiens
 <400> 513
 Thr Ser Leu Pro Ala Ser Ala Arg Glu Ala Phe Arg Ala Gly Leu Lys
 1 5 10 15
 Val Ser Phe Ala Asn Phe Ile Gln Tyr Leu
 20 25
 <210> 514
 <211> 25
 <212> PRT
 <213> Homo sapiens
 <400> 514
 Ser Tyr Ser Arg Trp Thr Gly Ser Pro Leu Pro Pro Glu Leu Pro Glu
 1 5 10 15
 Gln Asp Arg Gln Gln Leu Gly Gly Gly
 20 25
 <210> 515
 <211> 6
 <212> PRT
 <213> Homo sapiens
 <400> 515
 Ser Thr Gly Cys Ser Glu
 1 5
 <210> 516
 <211> 146
 <212> PRT
 <213> Homo sapiens
 <400> 516
 Cys Leu Cys Leu Gly Cys Gly Leu Pro Glu Leu His Ser Tyr Leu Asp
 1 5 10 15
 Pro Gly Pro Tyr Leu Leu Val Tyr Pro Thr Leu Phe Trp Leu Cys Pro
 20 25 30
 Ser Ala Val Ser Pro Trp Ala Tyr Thr Cys Tyr Gln Leu Gly Leu Gly
 35 40 45

SUBSTITUTE SHEET (RULE 26)

230

Pro Gln Trp Gly Ala Ala Ala Leu Ser Phe Thr Val Asp Ala Ala Ile
 50 55 60

Arg Val Trp Asp Val Ser Thr Glu Thr Cys Val Pro Leu Pro Trp Phe
 65 70 75 80

Arg Gly Gly Gly Val Thr Asn Cys Ser Gly Pro Gln Thr Ala Ala Lys
 85 90 95

Ser Trp Leu Pro Leu Leu Gln Leu Ser Phe Glu Ser Gly Arg Pro Arg
 100 105 110

Cys Gly Leu Val Arg Gly Gly Leu Leu Tyr Gln Gly Ala Val Arg Leu
 115 120 125

Ala Ala Gly Ala Gln Met Ala Ala Asp Cys Cys Ser Leu Tyr Trp Glu
 130 135 140

Ser His
 145

<210> 517
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 517
 Tyr Pro Thr Leu Phe Trp Leu Cys Pro Ser Ala Val Ser Pro Trp Ala
 1 5 10 15

Tyr Thr Cys Tyr Gln Leu Gly Leu Gly Pro
 20 25

<210> 518
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 518
 Asp Val Ser Thr Glu Thr Cys Val Pro Leu Pro Trp Phe Arg Gly Gly
 1 5 10 15

Gly Val Thr Asn Cys Ser Gly Pro Gln
 20 25

<210> 519
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 519
 Leu Leu Tyr Gln Gly Ala Val Arg Leu Ala Ala Gly Ala Gln Met Ala
 1 5 10 15

SUBSTITUTE SHEET (RULE 26)

231

Ala Asp Cys Cys Ser Leu
20

<210> 520

<211> 155

<212> PRT

<213> Homo sapiens

<400> 520

Asn Lys Arg Lys Thr Tyr Leu Phe Leu Glu Val Gly Met Trp Gly Val
1 5 10 15

Gly Gln Asn Arg Trp Trp Pro Trp Glu Arg Val Pro Arg Gly Arg Gly
20 25 30

Trp Gly Cys Leu Ser Lys Glu Gly Gln Val Met Asn Arg Ala Ser Thr
35 40 45

Pro Ser Arg Gly Phe Leu Gly Pro Pro Lys His Trp Ala Lys Thr Trp
50 55 60

Lys Leu Gly Ile Asp Lys Val Gln Arg Asp Val Gly Asn Ser Ala Cys
65 70 75 80

Gly Pro Ala His Thr Glu Gln Gly Pro Phe Val Glu Gly Arg Trp Lys
85 90 95

Val Met Ser Trp Gly Trp Ala Pro Gly Ser Pro Trp Ile Met Pro Gln
100 105 110

Gly Arg Ser Ser Asn Thr Gly Leu Phe Arg Val Arg Lys Arg Arg Met
115 120 125

Thr Gly Leu Pro Ser Cys Thr Leu Gly Phe Pro Phe Ile Ser Thr Ala
130 135 140

Arg Arg Ser Pro Leu Gly Ser Gln Thr Met Glu
145 150 155

<210> 521

<211> 26

<212> PRT

<213> Homo sapiens

<400> 521

Gly Val Gly Gln Asn Arg Trp Trp Pro Trp Glu Arg Val Pro Arg Gly
1 5 10 15

Arg Gly Trp Gly Cys Leu Ser Lys Glu Gly
20 25

<210> 522

<211> 26

<212> PRT

SUBSTITUTE SHEET (RULE 26)

232

<213> Homo sapiens

<400> 522

Ala Lys Thr Trp Lys Leu Gly Ile Asp Lys Val Gln Arg Asp Val Gly
1 5 10 15

Asn Ser Ala Cys Gly Pro Ala His Thr Glu
20 25

<210> 523

<211> 42

<212> PRT

<213> Homo sapiens

<400> 523

Trp Ala Pro Gly Ser Pro Trp Ile Met Pro Gln Gly Arg Ser Ser Asn
1 5 10 15

Thr Gly Leu Phe Arg Val Arg Lys Arg Arg Met Thr Gly Leu Pro Ser
20 25 30

Cys Thr Leu Gly Phe Pro Phe Ile Ser Thr
35 40

<210> 524

<211> 17

<212> PRT

<213> Homo sapiens

<400> 524

Ser Ser Tyr Gln Cys Pro Lys Val Thr Phe Phe Lys Ser Ser Val Asp
1 5 10 15

Thr

<210> 525

<211> 14

<212> PRT

<213> Homo sapiens

<400> 525

Tyr Ile Tyr Ser Tyr Leu Gly Phe Phe Asn Gln Ile Asn Lys
1 5 10

<210> 526

<211> 6

<212> PRT

<213> Homo sapiens

<400> 526

Ala Arg Asp Leu Ile Leu
1 5

SUBSTITUTE SHEET (RULE 26)

<210> 527
 <211> 43
 <212> PRT
 <213> Homo sapiens

<400> 527
 Leu Thr Phe Tyr Leu Gln Phe Leu Ala Pro Lys Asp Lys Pro Ser Gly
 1 5 10 15
 Asp Thr Ala Ala Val Phe Glu Glu Gly Gly Asp Val Asp Asp Leu Val
 20 25 30
 Ser Thr Phe Asn Met His Leu Val Phe Cys Asp
 35 40

<210> 528
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 528
 Phe Leu Ala Pro Lys Asp Lys Pro Ser Gly Asp Thr Ala Ala Val Phe
 1 5 10 15
 Glu Glu Gly Gly Asp Val Asp Asp Leu
 20 25

<210> 529
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 529
 Ala Arg Ala Gly Ala Lys Ile Leu Phe Glu Gly Glu Phe
 1 5 10

<210> 530
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 530
 Asn Phe Glu Ile His Ser Ala Phe Pro Phe Met Leu Phe Val Ala Cys
 1 5 10 15
 Leu Leu His Ser Ser Cys Pro Arg Thr Ala Arg Phe Leu Ala Ser Pro
 20 25 30
 Leu Ser Glu Ser Asn Val Ile Phe Tyr Gln Asn Gln Tyr Gln Phe Pro
 35 40 45
 Cys Ile Leu Cys Phe Ile Glu Phe Ala Arg Leu Thr Ser Phe Lys His

SUBSTITUTE SHEET (RULE 26)

234

50 55 60

Leu Ile His Ser Gln Ser His Leu Val Arg Leu Gln Tyr Glu Asp Phe
 65 70 75 80

Ser Val Ser Ser Glu Ala Trp Asp Thr Glu Leu Thr
 85 90

<210> 531
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 531
 Phe Pro Phe Met Leu Phe Val Ala Cys Leu Leu His Ser Ser Cys Pro
 1 5 10 15

Arg Thr Ala Arg Phe Leu Ala Ser Pro Leu
 20 25

<210> 532
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 532
 Asn Val Ile Phe Tyr Gln Asn Gln Tyr Gln Phe Pro Cys Ile Leu Cys
 1 5 10 15

Phe Ile Glu Phe Ala Arg Leu Thr Ser Phe
 20 25

<210> 533
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 533
 Ser Gln Ser His Leu Val Arg Leu Gln Tyr Glu Asp Phe Ser Val Ser
 1 5 10 15

Ser Glu Ala Trp Asp Thr Glu
 20

<210> 534
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 534
 Gln Lys Phe Leu Cys Ala Ser Asp Gly Asp
 1 5 10

SUBSTITUTE SHEET (RULE 26)

<210> 535
 <211> 177
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (160)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (162)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 535
 Ala Glu Val Pro Leu Arg Val Arg Arg Arg His Gly Arg Pro His Gly
 1 5 10 15
 Pro Gly Gly Arg Gln Leu Ala Leu Gly Ile Pro Ala Leu Arg Ser Leu
 20 25 30
 Pro Gly Cys Val Pro Arg His His Gly Cys Ser Pro Gly Tyr Gly Cys
 35 40 45
 Leu His Arg Arg Ile Leu Cys Leu Pro Leu Ile Leu Leu Leu Val Tyr
 50 55 60
 Lys Gln Arg Gln Ala Ala Ser Asn Arg Arg Ala Gln Glu Leu Val Arg
 65 70 75 80
 Met Asp Ser Asn Ile Gln Gly Ile Glu Asn Pro Gly Phe Glu Ala Ser
 85 90 95
 Pro Pro Ala Gln Gly Ile Pro Glu Ala Lys Val Arg His Pro Leu Ser
 100 105 110
 Tyr Val Ala Gln Arg Gln Pro Ser Glu Ser Gly Arg His Leu Leu Ser
 115 120 125
 Glu Pro Ser Thr Pro Leu Ser Pro Pro Gly Pro Gly Asp Val Phe Phe
 130 135 140
 Pro Ser Leu Asp Pro Val Pro Asp Ser Pro Asn Phe Glu Val Ile Xaa
 145 150 155 160
 Pro Xaa Trp Gly Thr Val Gly Cys Cys Gly Trp Val Trp Gly Arg Cys
 165 170 175
 Ile

<210> 536
 <211> 27
 <212> PRT

236

<213> Homo sapiens

<400> 536

Gly Pro Gly Gly Arg Gln Leu Ala Leu Gly Ile Pro Ala Leu Arg Ser
 1 5 10 15

Leu Pro Gly Cys Val Pro Arg His His Gly Cys
 20 25

<210> 537

<211> 25

<212> PRT

<213> Homo sapiens

<400> 537

Phe Glu Ala Ser Pro Pro Ala Gln Gly Ile Pro Glu Ala Lys Val Arg
 1 5 10 15

His Pro Leu Ser Tyr Val Ala Gln Arg
 20 25

<210> 538

<211> 88

<212> PRT

<213> Homo sapiens

<400> 538

Asp Met Ser Leu Gly Met Trp Gln His Gln Trp Asp Lys Met Asp Thr
 1 5 10 15

Gly Pro Pro Ser Gln Ala Pro Asp Thr Gly His Gly Gly Glu Thr Ser
 20 25 30

Pro Pro Trp His Ala Leu Gly Ser Pro Val Leu Pro Glu Ala Ala Leu
 35 40 45

Leu Ser Asp Phe Leu Phe Val Pro Gln Trp Leu Trp Gly Gln Ala Cys
 50 55 60

Leu Pro Thr Gly His Arg His Leu Pro Gln Leu Pro Pro Thr Ser Ser
 65 70 75 80

Phe Ser Glu Asp Leu Ser Thr Gly
 85

<210> 539

<211> 78

<212> PRT

<213> Homo sapiens

<400> 539

Pro Val Asp Arg Ser Ser Glu Lys Leu Leu Val Gly Gly Ser Trp Gly
 1 5 10 15

SUBSTITUTE SHEET (RULE 26)

237

Arg Trp Arg Trp Pro Val Gly Arg Gln Ala Trp Pro Gln Ser His Cys
 20 25 30

Gly Thr Lys Arg Lys Ser Asp Arg Arg Ala Ala Ser Gly Lys Thr Gly
 35 40 45

Glu Pro Ser Ala Cys His Gly Gly Glu Val Ser Pro Pro Cys Pro Val
 50 55 60

Ser Gly Ala Trp Glu Gly Gly Pro Val Ser Ile Leu Ser His
 65 70 75

<210> 540

<211> 22

<212> PRT

<213> Homo sapiens

<400> 540

Pro Val Asp Arg Ser Ser Glu Lys Leu Leu Val Gly Gly Ser Trp Gly
 1 5 10 15

Arg Trp Arg Trp Pro Val
 20

<210> 541

<211> 25

<212> PRT

<213> Homo sapiens

<400> 541

Thr Lys Arg Lys Ser Asp Arg Arg Ala Ala Ser Gly Lys Thr Gly Glu
 1 5 10 15

Pro Ser Ala Cys His Gly Gly Glu Val
 20 25

<210> 542

<211> 46

<212> PRT

<213> Homo sapiens

<400> 542

Met Thr Ser Lys Phe Gly Glu Ser Gly Thr Gly Ser Arg Asp Gly Lys
 1 5 10 15

Lys Thr Ser Pro Gly Pro Gly Gly Asp Arg Gly Val Leu Gly Ser Glu
 20 25 30

Ser Arg Cys Arg Pro Asp Ser Glu Gly Cys Arg Trp Ala Thr
 35 40 45

<210> 543

<211> 20

SUBSTITUTE SHEET (RULE 26)

238

<212> PRT

<213> Homo sapiens

<400> 543

Ser Pro Gly Pro Gly Gly Asp Arg Gly Val Leu Gly Ser Glu Ser Arg
1 5 10 15

Cys Arg Pro Asp
20

<210> 544

<211> 23

<212> PRT

<213> Homo sapiens

<400> 544

Pro Pro Ser Gln Ala Pro Asp Thr Gly His Gly Gly Glu Thr Ser Pro
1 5 10 15

Pro Trp His Ala Leu Gly Ser
20

<210> 545

<211> 15

<212> PRT

<213> Homo sapiens

<400> 545

His Glu Val Gln Pro Ser Tyr Leu Pro Ser Asn Ser Gly Leu Ile
1 5 10 15

<210> 546

<211> 22

<212> PRT

<213> Homo sapiens

<400> 546

Leu Arg Ile Ser Val Leu Cys Arg Glu Thr Ala Cys Asn Trp Ser His
1 5 10 15

His Pro Leu Asp Ser Asn
20

<210> 547

<211> 32

<212> PRT

<213> Homo sapiens

<400> 547

Leu Thr Val Thr Val Arg Asn Pro Gly Ser Thr His Ala Ser Gly Arg
1 5 10 15

Pro Arg Arg Arg Ser Gly Val Trp Ala Arg Arg Gly Leu Val Trp Gln

SUBSTITUTE SHEET (RULE 26)

239

20

25

30

<210> 548

<211> 38

<212> PRT

<213> Homo sapiens

<400> 548

Thr Pro Cys Ser Ala Gln Phe Ser Val Leu Gly Pro Ser Gly Pro Ile

1

5

10

15

Leu Ala Met Val Gly Glu Asp Ala Asp Leu Pro Cys His Leu Phe Pro

20

25

30

Thr Met Ser Ala Glu Thr

35

<210> 549

<211> 60

<212> PRT

<213> Homo sapiens

<400> 549

Met Glu Leu Lys Trp Val Ser Ser Ser Leu Arg Gln Val Val Asn Val

1

5

10

15

Tyr Ala Asp Gly Lys Glu Val Glu Asp Arg Gln Ser Ala Pro Tyr Arg

20

25

30

Gly Arg Thr Ser Ile Leu Arg Asp Gly Ile Thr Ala Gly Lys Ala Ala

35

40

45

Leu Arg Ile His Asn Val Thr Ala Ser Asp Ser Gly

50

55

60

<210> 550

<211> 26

<212> PRT

<213> Homo sapiens

<400> 550

Leu Glu Val Lys Gly Tyr Glu Asp Gly Gly Ile His Leu Glu Cys Arg

1

5

10

15

Ser Thr Gly Trp Tyr Pro Gln Pro Gln Ile

20

25

<210> 551

<211> 80

<212> PRT

SUBSTITUTE SHEET (RULE 26)

240

<213> Homo sapiens

<400> 551

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Met Ala Ser Ser Leu Ala Phe Leu Leu Leu Asn Phe His Val Ser Leu
 1             5             10             15

Leu Leu Val Gln Leu Leu Thr Pro Cys Ser Ala Gln Phe Ser Val Leu
                20             25             30

Gly Pro Ser Gly Pro Ile Leu Ala Met Val Gly Glu Asp Ala Asp Leu
      35             40             45

Pro Cys His Leu Phe Pro Thr Met Ser Ala Glu Thr Met Glu Leu Lys
      50             55             60

Trp Val Ser Ser Ser Leu Arg Gln Val Val Asn Val Tyr Ala Asp Gly
 65             70             75             80

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<210> 552

<211> 103

<212> PRT

<213> Homo sapiens

<400> 552

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Arg His Glu Leu Ser His Asn Arg Lys Asn Gly Glu Leu Leu Ile Asp
 1             5             10             15

Arg Leu Tyr Ser Val Gly Ser Asp Ser Pro Met Gly Ile Pro Arg Asp
      20             25             30

Ile Ile Phe Thr Asp Gly Phe Pro Tyr Trp Asn Pro Lys Val Lys Thr
      35             40             45

Leu Lys Asp Arg His Phe Trp Gln Ser Ile Asp Glu Asn Gly Lys Phe
      50             55             60

Pro Gly Phe Pro Ser Ala Gln Leu Ser Cys Leu Pro Pro Leu Gly Pro
      65             70             75             80

Ala Ala His Ser Leu Leu Ser Ser Val Phe Cys Ala Trp Thr Leu Trp
      85             90             95

Ala His Pro Gly His Gly Gly
      100

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<210> 553

<211> 24

<212> PRT

<213> Homo sapiens

<400> 553

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Leu Leu Ile Asp Arg Leu Tyr Ser Val Gly Ser Asp Ser Pro Met Gly

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SUBSTITUTE SHEET (RULE 26)

1 5 10 15 20 241
 Ile Pro Arg Asp Ile Ile Phe Thr
 20
 <210> 554
 <211> 25
 <212> PRT
 <213> Homo sapiens
 <400> 554
 Asn Pro Lys Val Lys Thr Leu Lys Asp Arg His Phe Trp Gln Ser Ile
 1 5 10 15
 Asp Glu Asn Gly Lys Phe Pro Gly Phe
 20 25
 <210> 555
 <211> 24
 <212> PRT
 <213> Homo sapiens
 <400> 555
 Leu Gly Pro Ala Ala His Ser Leu Leu Ser Ser Val Phe Cys Ala Trp
 1 5 10 15
 Thr Leu Trp Ala His Pro Gly His
 20
 <210> 556
 <211> 135
 <212> PRT
 <213> Homo sapiens
 <400> 556
 Arg Leu Gln His Trp Val Leu Ile Phe Thr Leu Glu Val Lys Gly Tyr
 1 5 10 15
 Glu Asp Gly Gly Ile His Leu Glu Cys Arg Ser Thr Gly Trp Tyr Pro
 20 25 30
 Gln Pro Gln Ile Gln Trp Ser Asn Ala Lys Gly Glu Asn Ile Pro Ala
 35 40 45
 Val Glu Ala Pro Val Val Ala Asp Gly Val Gly Leu Tyr Glu Val Ala
 50 55 60
 Ala Ser Val Ile Met Arg Gly Gly Ser Gly Glu Gly Val Ser Cys Ile
 65 70 75 80
 Ile Arg Asn Ser Leu Leu Gly Leu Glu Lys Thr Ala Ser Ile Ser Ile
 85 90 95
 Ala Asp Pro Ser Ser Gly Ala Pro Ser Pro Gly Ser Gln Pro Trp Gln

SUBSTITUTE SHEET (RULE 26)

242

100 105 110

Gly Pro Cys Leu Ser Cys Cys Cys Phe Ser Pro Glu Pro Val Thr Ser
 115 120 125

Cys Gly Asp Asn Arg Arg Lys
 130 135

<210> 557
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 557
 Gly Gly Ile His Leu Glu Cys Arg Ser Thr Gly Trp Tyr Pro Gln Pro
 1 5 10 15

Gln Ile Gln Trp Ser Asn Ala Lys Gly
 20 25

<210> 558
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 558
 Pro Gln Ile Gln Trp Ser Asn Ala Lys Gly Glu Asn Ile Pro Ala Val
 1 5 10 15

Glu Ala Pro Val Val Ala Asp Gly Val Gly Leu
 20 25

<210> 559
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 559
 Asn Ile Pro Ala Val Glu Ala Pro Val Val Ala Asp Gly Val Gly Leu
 1 5 10 15

Tyr Glu Val Ala Ala Ser Val Ile Met Arg Gly
 20 25

<210> 560
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 560
 Ser Gly Ala Pro Ser Pro Gly Ser Gln Pro Trp Gln Gly Pro Cys Leu
 1 5 10 15

SUBSTITUTE SHEET (RULE 26)

243

Ser Cys Cys Cys Phe Ser Pro Glu Pro Val Thr
 20 25

<210> 561

<211> 131

<212> PRT

<213> Homo sapiens

<400> 561

Ser Ser Ser Ile Cys Asp His Glu Arg Arg Leu Arg Gly Gly Cys Ile
 1 5 10 15

Leu His His Gln Lys Phe Pro Pro Arg Pro Gly Lys Asp Ser Gln His
 20 25 30

Phe His Arg Arg Pro Phe Phe Arg Ser Ala Gln Pro Trp Ile Ala Ala
 35 40 45

Leu Ala Gly Thr Leu Pro Ile Leu Leu Leu Leu Ala Gly Ala Ser
 50 55 60

Tyr Phe Leu Trp Arg Gln Gln Lys Glu Ile Thr Ala Leu Ser Ser Glu
 65 70 75 80

Ile Glu Ser Glu Gln Glu Met Lys Glu Met Gly Tyr Ala Ala Thr Glu
 85 90 95

Arg Glu Ile Ser Leu Arg Glu Ser Leu Gln Glu Glu Leu Lys Arg Lys
 100 105 110

Lys Ile Gln Tyr Leu Thr Arg Gly Glu Glu Ser Ser Ser Asp Thr Asn
 115 120 125

Lys Ser Ala
 130

<210> 562

<211> 28

<212> PRT

<213> Homo sapiens

<400> 562

Lys Asp Ser Gln His Phe His Arg Arg Pro Phe Phe Arg Ser Ala Gln
 1 5 10 15

Pro Trp Ile Ala Ala Leu Ala Gly Thr Leu Pro Ile
 20 25

<210> 563

<211> 28

<212> PRT

<213> Homo sapiens

<400> 563

SUBSTITUTE SHEET (RULE 26)

244

Glu Ile Glu Ser Glu Gln Glu Met Lys Glu Met Gly Tyr Ala Ala Thr
 1 5 10 15

Glu Arg Glu Ile Ser Leu Arg Glu Ser Leu Gln Glu
 20 25

<210> 564

<211> 33

<212> PRT

<213> Homo sapiens

<400> 564

Val Asn Asn Met Ile Ala Phe Tyr Ser Ala Arg Asp Ser Tyr Val Tyr
 1 5 10 15

Pro His Phe Ser Gly Glu Glu Met Leu Gln Met Arg Leu His Leu Val
 20 25 30

Lys

<210> 565

<211> 38

<212> PRT

<213> Homo sapiens

<400> 565

Thr Pro Cys Ser Ala Gln Phe Ser Val Leu Gly Pro Ser Gly Pro Ile
 1 5 10 15

Leu Ala Met Val Gly Glu Asp Ala Asp Leu Pro Cys His Leu Phe Pro
 20 25 30

Thr Met Ser Ala Glu Thr
 35

<210> 566

<211> 23

<212> PRT

<213> Homo sapiens

<400> 566

Lys Trp Val Ser Ser Ser Leu Arg Gln Val Val Asn Val Tyr Ala Asp
 1 5 10 15

Gly Lys Glu Val Glu Asp Arg
 20

<210> 567

<211> 25

<212> PRT

<213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

245

<400> 567

Arg Thr Ser Ile Leu Arg Asp Gly Ile Thr Ala Gly Lys Ala Ala Leu
1 5 10 15

Arg Ile His Asn Val Thr Ala Ser Asp
20 25

<210> 568

<211> 23

<212> PRT

<213> Homo sapiens

<400> 568

Cys Tyr Phe Gln Asp Gly Asp Phe Tyr Glu Lys Ala Leu Val Glu Leu
1 5 10 15

Lys Val Ala Ala Leu Gly Ser
20

<210> 569

<211> 23

<212> PRT

<213> Homo sapiens

<400> 569

Gly Tyr Glu Asp Gly Gly Ile His Leu Glu Cys Arg Ser Thr Gly Trp
1 5 10 15

Tyr Pro Gln Pro Gln Ile Gln
20

<210> 570

<211> 23

<212> PRT

<213> Homo sapiens

<400> 570

Asn Ile Pro Ala Val Glu Ala Pro Val Val Ala Asp Gly Val Gly Leu
1 5 10 15

Tyr Glu Val Ala Ala Ser Val
20

<210> 571

<211> 21

<212> PRT

<213> Homo sapiens

<400> 571

Gln Gln Lys Glu Ile Thr Ala Leu Ser Ser Glu Ile Glu Ser Glu Gln
1 5 10 15

Glu Met Lys Glu Met

SUBSTITUTE SHEET (RULE 26)

246

20

<210> 572

<211> 24

<212> PRT

<213> Homo sapiens

<400> 572

Leu Arg Glu Ser Leu Gln Glu Glu Leu Lys Arg Lys Lys Ile Gln Tyr
1 5 10 15

Leu Thr Arg Gly Glu Glu Ser Ser
20

<210> 573

<211> 13

<212> PRT

<213> Homo sapiens

<400> 573

Gly Glu Glu Met Leu Gln Met Arg Leu His Leu Val Lys
1 5 10

<210> 574

<211> 40

<212> PRT

<213> Homo sapiens

<400> 574

Ser Ala Gln Phe Ser Val Leu Gly Pro Ser Gly Pro Ile Leu Ala Met
1 5 10 15

Val Gly Glu Asp Ala Asp Leu Pro Cys His Leu Phe Pro Thr Met Ser
20 25 30

Ala Glu Thr Met Glu Leu Lys Trp
35 40

<210> 575

<211> 12

<212> PRT

<213> Homo sapiens

<400> 575

Pro Gln Gly Gly Leu Thr Leu Pro Ser Val Trp Gly
1 5 10

<210> 576

<211> 106

<212> PRT

<213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

247

<400> 576

Gly Gly Pro Cys His Leu Trp Leu Leu Gly Pro Arg Arg Thr Gln Leu
 1 5 10 15
 Pro Gly Arg Arg Ala Ser Leu Pro Phe Arg Ser Gln Gly Glu Leu Thr
 20 25 30
 Gln Ala Phe Leu Leu Gly Leu Trp Lys His Gln Met Pro Ala Leu Thr
 35 40 45
 Gln Glu Gln Gln Val Arg Ala Glu Arg Arg Arg Glu Ala Val Arg Met
 50 55 60
 Glu Ile Pro Gly Leu Phe Phe Ala Ser Leu Ala Asn Trp Gly Leu Leu
 65 70 75 80
 Tyr Arg Thr Ser Gln Asp Phe Ile Ser Pro Tyr Leu Cys Ala Ala Pro
 85 90 95
 Ser Thr Pro His Pro Pro Leu Gly Gly Pro
 100 105

<210> 577

<211> 23

<212> PRT

<213> Homo sapiens

<400> 577

Gly Pro Arg Arg Thr Gln Leu Pro Gly Arg Arg Ala Ser Leu Pro Phe
 1 5 10 15
 Arg Ser Gln Gly Glu Leu Thr
 20

<210> 578

<211> 24

<212> PRT

<213> Homo sapiens

<400> 578

Gln Met Pro Ala Leu Thr Gln Glu Gln Gln Val Arg Ala Glu Arg Arg
 1 5 10 15
 Arg Glu Ala Val Arg Met Glu Ile
 20

<210> 579

<211> 25

<212> PRT

<213> Homo sapiens

<400> 579

Ala Asn Trp Gly Leu Leu Tyr Arg Thr Ser Gln Asp Phe Ile Ser Pro
 1 5 10 15

SUBSTITUTE SHEET (RULE 26)

248

Tyr Leu Cys Ala Ala Pro Ser Thr Pro
 20 25

<210> 580
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 580
 Leu Ser Phe Lys Asp Lys Ser Thr Tyr Ile Glu Ser Ser Thr Lys Val
 1 5 10 15

Tyr Asp Asp Met Ala Phe Arg Tyr Leu Ser Trp Ile Leu Phe Pro Leu
 20 25 30

Leu Gly

<210> 581
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 581
 Leu Leu Thr Phe Gly Phe Ile Thr Met Thr Pro Gln Leu Phe Ile Asn
 1 5 10 15

Tyr Lys Leu Lys Ser Val Ala His Leu Pro Trp Arg Met Leu Thr
 20 25 30

<210> 582
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 582
 Thr Tyr Lys Ala Leu Asn Thr Phe Ile Asp Asp Leu Phe Ala Phe Val
 1 5 10 15

Ile Lys Met Pro Val Met Tyr Arg Ile Gly Cys Leu Arg Asp
 20 25 30

<210> 583
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 583
 Asp Val Val Phe Phe Ile Tyr Leu Tyr Gln Arg Trp Ile Tyr Arg Val
 1 5 10 15

Asp Pro Thr Arg Val Asn Glu Phe Gly Met Ser Gly Glu Asp

SUBSTITUTE SHEET (RULE 26)

249

20

25

30

<210> 584

<211> 44

<212> PRT

<213> Homo sapiens

<400> 584

Val Ala Gly Ile Phe Pro Arg Leu Ser Phe Lys Asp Lys Ser Thr Tyr
 1 5 10 15

Ile Glu Ser Ser Thr Lys Val Tyr Asp Asp Met Ala Phe Arg Tyr Leu
 20 25 30

Ser Trp Ile Leu Phe Pro Leu Leu Gly Cys Tyr Ala
 35 40

<210> 585

<211> 19

<212> PRT

<213> Homo sapiens

<400> 585

Trp Ala Ala Met Pro Ser Thr Val Phe Cys Thr Trp Ser Thr Arg Ala
 1 5 10 15

Gly Thr Pro

<210> 586

<211> 28

<212> PRT

<213> Homo sapiens

<400> 586

Pro Trp Val Ala Gly Ile Phe Pro Arg Leu Ser Phe Lys Asp Lys Ser
 1 5 10 15

Thr Tyr Ile Glu Ser Ser Thr Lys Val Tyr Asp Asp
 20 25

<210> 587

<211> 88

<212> PRT

<213> Homo sapiens

<400> 587

Ala Gly Glu Asp Ser Cys His Pro Val Leu Ser Val Gln Pro Asp Val
 1 5 10 15

His Asp Leu Gly Trp Gln Glu Ser Ser Pro Ala Tyr Pro Ser Arg Thr
 20 25 30

SUBSTITUTE SHEET (RULE 26)

250

Ser Pro Arg Ile Ser Ser Pro Arg Pro Lys Cys Met Met Ile Trp His
 35 40 45

Ser Gly Thr Cys Pro Gly Ser Ser Ser Arg Ser Trp Ala Ala Met Pro
 50 55 60

Ser Thr Val Phe Cys Thr Trp Ser Thr Arg Ala Gly Thr Pro Gly Cys
 65 70 75 80

Ser Ala Cys Ser Thr Ala Ser Cys
 85

<210> 588

<211> 30

<212> PRT

<213> Homo sapiens

<400> 588

Leu Ser Val Gln Pro Asp Val His Asp Leu Gly Trp Gln Glu Ser Ser
 1 5 10 15

Pro Ala Tyr Pro Ser Arg Thr Ser Pro Arg Ile Ser Ser Pro
 20 25 30

<210> 589

<211> 25

<212> PRT

<213> Homo sapiens

<400> 589

Gly Ser Ser Ser Arg Ser Trp Ala Ala Met Pro Ser Thr Val Phe Cys
 1 5 10 15

Thr Trp Ser Thr Arg Ala Gly Thr Pro
 20 25

<210> 590

<211> 22

<212> PRT

<213> Homo sapiens

<400> 590

Cys Tyr Ala Val Tyr Ser Leu Leu Tyr Leu Glu His Lys Gly Trp Tyr
 1 5 10 15

Ser Trp Val Leu Ser Met
 20

<210> 591

<211> 12

<212> PRT

<213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

251

<400> 591

Leu Gly Glu Phe Leu Ser Ser Gln Cys Phe Leu Pro
 1 5 10

<210> 592

<211> 20

<212> PRT

<213> Homo sapiens

<400> 592

Arg Ser Arg Arg Asn Arg Val Ala Met Gly Met Trp Ala Ser Leu Asp
 1 5 10 15

Ala Leu Trp Glu
 20

<210> 593

<211> 92

<212> PRT

<213> Homo sapiens

<400> 593

Pro Arg Val Arg Cys Gln Gln Arg Ala Glu Gly Gly Met Gly Ala Gly
 1 5 10 15

Ile Gly Val Gly Pro Ser Glu Arg Thr Asp Ile Ala Val Thr Pro Arg
 20 25 30

Gly Arg Ser Glu Gly Ala Ser Val Gly Val Ala Pro Val His Ala Glu
 35 40 45

Gly Ala Gly Gly Thr Gly Trp Pro Trp Gly Cys Gly His Arg Trp Thr
 50 55 60

Leu Cys Gly Arg Cys Arg Pro Arg Ser Val Ser Ser Gly Pro Cys Cys
 65 70 75 80

Ser Phe Pro Gly Gln Cys Ile Phe Gly Arg Pro Ser
 85 90

<210> 594

<211> 24

<212> PRT

<213> Homo sapiens

<400> 594

Gly Gly Met Gly Ala Gly Ile Gly Val Gly Pro Ser Glu Arg Thr Asp
 1 5 10 15

Ile Ala Val Thr Pro Arg Gly Arg
 20

<210> 595

SUBSTITUTE SHEET (RULE 26)

252

<211> 26

<212> PRT

<213> Homo sapiens

<400> 595

Gly Cys Gly His Arg Trp Thr Leu Cys Gly Arg Cys Arg Pro Arg Ser
 1 5 10 15

Val Ser Ser Gly Pro Cys Cys Ser Phe Pro
 20 25

<210> 596

<211> 24

<212> PRT

<213> Homo sapiens

<400> 596

Lys Lys His Gly Phe Asn Gln Gln Thr Leu Gly Phe Phe Thr Trp Lys
 1 5 10 15

Tyr Asn Lys Asn Lys Asn Leu Val
 20

<210> 597

<211> 21

<212> PRT

<213> Homo sapiens

<400> 597

Pro Lys Leu Leu Pro Cys Ser Pro Ala Glu Gly His Thr Ser Leu Gly
 1 5 10 15

Pro Leu Leu Pro Phe
 20

<210> 598

<211> 70

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 598

Ala Ser Leu Glu Leu Xaa Pro Ser Lys Ser Gln Leu Ser Thr Glu Trp
 1 5 10 15

Gly Phe Thr Trp Ile Val Gly Leu Gly Met Ser Pro Ser Thr Ala Leu
 20 25 30

Trp Thr Glu Cys Thr Cys Thr Pro Phe Leu Val Leu Leu Ser His Ala
 35 40 45

SUBSTITUTE SHEET (RULE 26)

Ser Gly His Phe Phe Trp Leu Ser Pro Leu Ala Ser Leu Val Ile Pro
 50 55 60

Pro Val Thr Asp Arg Lys
 65 70

<210> 599

<211> 32

<212> PRT

<213> Homo sapiens

<400> 599

Trp Gly Phe Thr Trp Ile Val Gly Leu Gly Met Ser Pro Ser Thr Ala
 1 5 10 15

Leu Trp Thr Glu Cys Thr Cys Thr Pro Phe Leu Val Leu Leu Ser His
 20 25 30

<210> 600

<211> 106

<212> PRT

<213> Homo sapiens

<400> 600

Val Ala Val Gly Val Cys Arg Glu Asp Val Met Gly Ile Thr Asp Arg
 1 5 10 15

Ser Lys Met Ser Pro Asp Val Gly Ile Trp Ala Ile Tyr Trp Ser Ala
 20 25 30

Ala Gly Tyr Trp Pro Leu Ile Gly Phe Pro Gly Thr Pro Thr Gln Gln
 35 40 45

Glu Pro Ala Leu His Arg Val Gly Val Tyr Leu Asp Arg Gly Thr Gly
 50 55 60

Asn Val Ser Phe Tyr Ser Ala Val Asp Gly Val His Leu His Thr Phe
 65 70 75 80

Ser Cys Ser Ser Val Ser Arg Leu Arg Pro Phe Phe Leu Val Glu Ser
 85 90 95

Ile Ser Ile Phe Ser His Ser Thr Ser Asp
 100 105

<210> 601

<211> 27

<212> PRT

<213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

254

<400> 601

Ile Thr Asp Arg Ser Lys Met Ser Pro Asp Val Gly Ile Trp Ala Ile
1 5 10 15

Tyr Trp Ser Ala Ala Gly Tyr Trp Pro Leu Ile
20 25

<210> 602

<211> 30

<212> PRT

<213> Homo sapiens

<400> 602

Arg Gly Thr Gly Asn Val Ser Phe Tyr Ser Ala Val Asp Gly Val His
1 5 10 15

Leu His Thr Phe Ser Cys Ser Ser Val Ser Arg Leu Arg Pro
20 25 30

<210> 603

<211> 11

<212> PRT

<213> Homo sapiens

<400> 603

Gly Thr Arg Gly Leu Gln Asn His Arg Thr Glu
1 5 10

<210> 604

<211> 6

<212> PRT

<213> Homo sapiens

<400> 604

Glu Leu Ser Gly Leu Gly
1 5

<210> 605

<211> 6

<212> PRT

<213> Homo sapiens

<400> 605

Met Asp Asp Ile Lys Ile
1 5

<210> 606

<211> 57

<212> PRT

<213> Homo sapiens

<400> 606

SUBSTITUTE SHEET (RULE 26)

255

Asn Phe Cys Val Ser Lys Asn Thr Phe Asn Arg Val Lys Arg Pro Ile
 1 5 10 15

Lys Trp Val Lys Ile Phe Ala Asn Asp Ile Ser Cys Lys Arg Leu Ile
 20 25 30

Ser Arg Ile His Lys Glu Ile Leu Pro Phe Asn Asn Lys Lys Gln Pro
 35 40 45

Asp Phe Lys Val Lys Lys Ser Arg Lys
 50 55

<210> 607

<211> 30

<212> PRT

<213> Homo sapiens

<400> 607

Phe Asn Arg Val Lys Arg Pro Ile Lys Trp Val Lys Ile Phe Ala Asn
 1 5 10 15

Asp Ile Ser Cys Lys Arg Leu Ile Ser Arg Ile His Lys Glu
 20 25 30

<210> 608

<211> 15

<212> PRT

<213> Homo sapiens

<400> 608

Glu Thr Gln Met Ala Asn Lys Tyr Met Lys Arg Cys Ser Thr Leu
 1 5 10 15

<210> 609

<211> 59

<212> PRT

<213> Homo sapiens

<400> 609

Val Ile Arg Glu Leu Gln Val Lys Ala Thr Arg Arg Cys His Tyr Thr
 1 5 10 15

Pro Ile Lys Trp Ser Lys Ser Lys Thr Leu Ile Ser Ser Asn Ala Asp
 20 25 30

Glu Tyr Val Glu Pro Thr Arg Thr Leu Ile His Cys Trp Trp Lys Cys
 35 40 45

Lys Ile Val Gln Pro Leu Cys Lys Thr Ala Trp
 50 55

<210> 610

<211> 22

SUBSTITUTE SHEET (RULE 26)

256

<212> PRT

<213> Homo sapiens

<400> 610

Ala Thr Arg Arg Cys His Tyr Thr Pro Ile Lys Trp Ser Lys Ser Lys
 1 5 10 15

Thr Leu Ile Ser Ser Asn
 20

<210> 611

<211> 64

<212> PRT

<213> Homo sapiens

<400> 611

Glu Leu Ser Gly Leu Val Ile Ile Thr Ala Trp Ile Ile Leu Cys His
 1 5 10 15

Ser Ser Ser Lys Asn Pro Val Gly Gly Arg Ile Gln Leu Ala Ile Ala
 20 25 30

Ile Val Ile Thr Leu Phe Pro Phe Ile Ser Trp Val Tyr Ile Tyr Ile
 35 40 45

Asn Lys Glu Met Arg Ser Ser Trp Pro Thr His Cys Lys Thr Val Ile
 50 55 60

<210> 612

<211> 57

<212> PRT

<213> Homo sapiens

<400> 612

Gln Cys Pro Gln Gly Thr Glu Thr Glu Ala Gly Val Ser Val Pro Pro
 1 5 10 15

Arg Lys Glu Gly Gly Gly Pro Tyr Val Ala Gly Leu Thr Ala Pro His
 20 25 30

Val Ala Gly Leu Thr Ala Pro Arg Arg Val Leu Arg Ala Met Ala Pro
 35 40 45

Ala Leu Trp Arg Ala Cys Asn Gly Leu
 50 55

<210> 613

<211> 32

<212> PRT

<213> Homo sapiens

SUBSTITUTE SHEET (RULE 26)

257

<400> 613

His Ser Ser Ser Lys Asn Pro Val Gly Gly Arg Ile Gln Leu Ala Ile
1 5 10 15

Ala Ile Val Ile Thr Leu Phe Pro Phe Ile Ser Trp Val Tyr Ile Tyr
20 25 30

<210> 614

<211> 32

<212> PRT

<213> Homo sapiens

<400> 614

Arg Lys Glu Gly Gly Gly Pro Tyr Val Ala Gly Leu Thr Ala Pro His
1 5 10 15

Val Ala Gly Leu Thr Ala Pro Arg Arg Val Leu Arg Ala Met Ala Pro
20 25 30

<210> 615

<211> 32

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 615

Pro Gly Arg Pro Thr Arg Pro Ala Xaa Ala Gly Leu Ser Ser Gly Gly
1 5 10 15

Ala Ala Gln Glu Ala Pro Gln Ala Asp Pro Arg Pro Trp Leu Ala Arg
20 25 30

<210> 616

<211> 51

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

SUBSTITUTE SHEET (RULE 26)

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 616

His	Tyr	Xaa	Ser	Thr	Pro	Gly	Arg	Val	Pro	Val	Arg	Gln	Phe	Ala	Ala
1				5					10					15	

Ala	Ser	Thr	Ser	Gly	Gly	Pro	Trp	Val	Pro	Gly	Gly	Xaa	Leu	Glu	Ala
			20					25					30		

Pro	Phe	Gln	Val	Ala	Pro	Ser	Leu	Ser	His	Ser	Thr	Pro	Val	Phe	Pro
		35					40					45			

Gly	Leu	Ile
	50	

<210> 617

<211> 22

<212> PRT

<213> Homo sapiens

<400> 617

Ala	Arg	Gly	Lys	Tyr	Glu	Ser	Ala	Gln	Pro	Gly	Gly	Thr	Gln	Pro	Glu
1				5					10					15	

Pro	Gly	Leu	Gly	Ala	Arg
			20		

<210> 618

<211> 24

<212> PRT

<213> Homo sapiens

<400> 618

Ser	Cys	Gly	Ser	Ser	Arg	Arg	Ser	Ala	Lys	Arg	Ser	Leu	Thr	Leu	Lys
1				5					10					15	

Leu	Ile	Asp	Phe	Ser	His	Arg	Ile
			20				

<210> 619

<211> 52

<212> PRT

<213> Homo sapiens

<400> 619

His	Tyr	Phe	Leu	Arg	Thr	Val	Ser	Gly	Leu	Ser	Val	Val	Pro	Val	Ser
1				5					10					15	

Leu	Arg	Cys	Cys	Met	Cys	Pro	Pro	Pro	Cys	Thr	Gly	Pro	Ala	Pro	Ala
		20						25					30		

SUBSTITUTE SHEET (RULE 26)

259

Thr Ala His Ser Pro Phe Asp Pro Pro Ala Leu Pro Ile Gln Phe Glu
 35 40 45

Tyr Gln Gln Ala
 50

<210> 620

<211> 45

<212> PRT

<213> Homo sapiens

<400> 620

Gln Leu Glu Ala Glu Ile Glu Asn Leu Ser Trp Lys Val Glu Arg Ala
 1 5 10 15

Asp Ser Tyr Asp Arg Gly Asp Leu Glu Asn Gln Met His Ile Ala Glu
 20 25 30

Gln Arg Arg Arg Thr Leu Leu Lys Asp Phe His Asp Thr
 35 40 45

<210> 621

<211> 24

<212> PRT

<213> Homo sapiens

<400> 621

Val Pro Val Ser Leu Arg Cys Cys Met Cys Pro Pro Pro Cys Thr Gly
 1 5 10 15

Pro Ala Pro Ala Thr Ala His Ser
 20

<210> 622

<211> 25

<212> PRT

<213> Homo sapiens

<400> 622

Ser Trp Lys Val Glu Arg Ala Asp Ser Tyr Asp Arg Gly Asp Leu Glu
 1 5 10 15

Asn Gln Met His Ile Ala Glu Gln Arg
 20 25

<210> 623

<211> 227

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

SUBSTITUTE SHEET (RULE 26)

260

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 623

His Glu Ala Trp Leu Arg Ser Ala Gly Thr Arg Glu Pro Pro Arg Glu
 1 5 10 15
 Gln Arg Thr Arg Arg Arg Gln Thr Ala Gln Leu Ala Leu Gln Val Pro
 20 25 30
 Ala Pro Ser Arg Thr Pro Pro Met Ala Thr Asp Val Phe Asn Ser Lys
 35 40 45
 Asn Leu Ala Val Xaa Ala Gln Lys Lys Ile Leu Gly Lys Met Val Ser
 50 55 60
 Lys Ser Ile Ala Thr Thr Leu Ile Asp Asp Thr Ser Ser Glu Val Leu
 65 70 75 80
 Asp Glu Leu Tyr Arg Val Thr Arg Glu Tyr Thr Gln Asn Lys Lys Glu
 85 90 95
 Ala Glu Lys Ile Ile Lys Asn Leu Ile Lys Thr Val Ile Lys Leu Ala
 100 105 110
 Ile Leu Tyr Arg Asn Asn Gln Phe Asn Gln Asp Glu Leu Ala Leu Met
 115 120 125
 Glu Lys Phe Lys Lys Lys Val His Gln Leu Ala Met Thr Val Val Ser
 130 135 140
 Phe His Gln Val Asp Tyr Thr Phe Asp Arg Asn Val Leu Ser Arg Leu
 145 150 155 160
 Leu Asn Glu Cys Arg Glu Met Leu His Gln Ile Ile Gln Arg His Leu
 165 170 175
 Thr Ala Lys Ser His Gly Arg Val Asn Asn Val Phe Asp His Phe Ser
 180 185 190
 Asp Cys Glu Phe Leu Ala Ala Leu Tyr Asn Pro Phe Gly Asn Phe Lys
 195 200 205
 Pro His Leu Gln Lys Leu Cys Asp Gly Ile Asn Lys Met Leu Asp Glu
 210 215 220
 Glu Asn Ile
 225

<210> 624

<211> 52

<212> PRT

<213> Homo sapiens

<400> 624

His Glu Ala Trp Leu Arg Ser Ala Gly Thr Arg Glu Pro Pro Arg Glu

SUBSTITUTE SHEET (RULE 26)

1 5 261 10 15
 Gln Arg Thr Arg Arg Arg Gln Thr Ala Gln Leu Ala Leu Gln Val Pro
 20 25 30
 Ala Pro Ser Arg Thr Pro Pro Met Ala Thr Asp Val Phe Asn Ser Lys
 35 40 45
 Asn Leu Ala Val
 50

<210> 625
 <211> 49
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (1)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 625
 Xaa Ala Gln Lys Lys Ile Leu Gly Lys Met Val Ser Lys Ser Ile Ala
 1 5 10 15
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 20 25 30
 Arg Val Thr Arg Glu Tyr Thr Gln Asn Lys Lys Glu Ala Glu Lys Ile
 35 40 45
 Ile

<210> 626
 <211> 51
 <212> PRT
 <213> Homo sapiens

<400> 626
 Lys Asn Leu Ile Lys Thr Val Ile Lys Leu Ala Ile Leu Tyr Arg Asn
 1 5 10 15
 Asn Gln Phe Asn Gln Asp Glu Leu Ala Leu Met Glu Lys Phe Lys Lys
 20 25 30
 Lys Val His Gln Leu Ala Met Thr Val Val Ser Phe His Gln Val Asp
 35 40 45
 Tyr Thr Phe
 50

<210> 627
 <211> 52

SUBSTITUTE SHEET (RULE 26)

262

<212> PRT

<213> Homo sapiens

<400> 627

Asp Arg Asn Val Leu Ser Arg Leu Leu Asn Glu Cys Arg Glu Met Leu
1 5 10 15

His Gln Ile Ile Gln Arg His Leu Thr Ala Lys Ser His Gly Arg Val
20 25 30

Asn Asn Val Phe Asp His Phe Ser Asp Cys Glu Phe Leu Ala Ala Leu
35 40 45

Tyr Asn Pro Phe
50

<210> 628

<211> 23

<212> PRT

<213> Homo sapiens

<400> 628

Gly Asn Phe Lys Pro His Leu Gln Lys Leu Cys Asp Gly Ile Asn Lys
1 5 10 15

Met Leu Asp Glu Glu Asn Ile
20

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US98/27059

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : C07H 21/00; C12N 1/15, 1/21, 5/10, 15/11, 15/63

US CL : 435/91.41, 320.1, 325, 252.3, 254.11; 536/23.1, 23.5, 24.31

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/91.41, 320.1, 325, 252.3, 254.11; 536/23.1, 23.5, 24.31

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

GENBANK, EMBL, SWISS-PROT, SPTREMBL, PIR,
searched: SEQ ID NO: 11-20 & 125-134

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. AA133381, HILLIER et al. 'WashU-Merck EST Project', complete record, 27 November 1996.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. T12400, LIEW et al. 'A catalogue of genes in the cardiovascular system as identified by expressed sequence tags', complete record, 27 November 1996.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. AA496982, HILLIER et al. 'WashU-Merck EST Project 1997', complete record, 12 August 1997.	1, 7-10

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
A document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
B earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*A* document member of the same patent family
O document referring to an oral disclosure, use, exhibition or other means	
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

02 MARCH 1999

Date of mailing of the international search report

23 MAR 1999

Name and mailing address of the ISA/US
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Telephone No. (703) 308-0196

Form PCT/ISA/210 (second sheet)(July 1992)*

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US98/27059

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. U14626, D'ALESSIO et al. 'Cloning vector pSVSport1', complete record, 24 May 1995.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. AJ000730, SPERANDEO et al. 'The full cDNA for the human cationic amino acid transporter 3 (HCAT3)', complete record, 02 December 1997.	1
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. R31044, HILLIER et al. 'The WashU-Merck EST Project', complete record, 28 April 1995.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. AA446873, HILLIER et al. 'WashU-Merck EST Project 1997', complete record, 03 June 1997.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. AA135715, HILLIER et al. 'WashU-Merck EST Project', complete record, 14 May 1997.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. AA194015, HILLIER et al. 'WashU-Merck EST Project', complete record, 19 May 1997.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. R72850, HILLIER et al. 'The WashU-Merck EST Project', complete record, 02 June 1995.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. T60940, HILLIER et al. 'WashU-Merck EST Project', complete record, 13 February 1995.	1, 7-10
X	Database GenBank, US National Library of Medicine, (Bethesda, MD, USA), No. H86863, HILLIER et al. 'The WashU-Merck EST Project', complete record, 21 November 1995.	1, 7-10

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US98/27059

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Please See Extra Sheet.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-10, 21

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet(1))(July 1992)★

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US98/27059

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING

This ISA found multiple inventions as follows:

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional search fees must be paid.

Groups I-XXVII, claim(s) 1-10 and 21, drawn to a polynucleotide, vector comprising same, first claimed method of use, i.e. using polynucleotide to make a cell, and the cell made by the process. Claims 1-10 and 21 recite 114 independent polynucleotides (SEQ ID NO: 11-124 or encoding SEQ ID NO: 125-238). Group I consists of the first ten polynucleotides (SEQ ID NOs 11-20 or encoding SEQ ID NOs 125-134). Each of groups II-XXVII consists of up to four of the remaining 104 polynucleotides, in order.

Groups XXVIII-CXLI, claim(s) 11, 12, 14-16 and 17 (first part), drawn to a polypeptide, a method of making the polypeptide and first claimed method of use, i.e. in treatment. These claims recite 114 independent polypeptides, each of groups XXVIII-CXLI consists of a single polypeptide as set forth in SEQ ID NOs 125-238, respectively.

Groups CXLI-CCLV, claim(s) 13 and 19, drawn to an antibody to a polypeptide and the first claimed method of using same. These claims recite 114 independent antibodies to 114 independent polypeptides, each of groups CXLI-CCLV consists an antibody against a single polypeptide as set forth in SEQ ID NOs 125-238, respectively.

Groups CCLVI-CCLXXXII, claim(s) 17(second part), drawn to an additional method of using a polynucleotide. Group CCLVI consists of methods reciting the first ten polynucleotides (SEQ ID NOs 11-20 or encoding SEQ ID NOs 125-134). Each of groups CCLVII-CCLXXXII pertains to up to four of the remaining 104 polynucleotides, in order.

Groups CCLXXXIII-CCCLIX, claim(s) 18, drawn to a second additional method of using a polynucleotide. Group CCLXXXIII consists of methods reciting the first ten polynucleotides (SEQ ID NOs 11-20 or encoding SEQ ID NOs 125-134). Each of groups CCLXXXIV-CCCLIX pertains to up to four of the remaining 104 polynucleotides, in order.

Groups CCCX-CDXXIII, claim(s) 20, drawn to an additional method of using the polypeptide. These claims recite 114 independent methods of using 114 independent polypeptides, each of groups CCCX-CDXXIII consists an antibody against a single polypeptide as set forth in SEQ ID NOs 125-238, respectively.

Groups CDXXIV-CDL, claim 22, drawn to a third additional method of using a polynucleotide. Group CDXXIV consists of methods reciting the first ten polynucleotides (SEQ ID NOs 11-20 or encoding SEQ ID NOs 125-134). Each of groups CDXXV-CDL pertains to up to four of the remaining 53 polynucleotides, in order.

Claim 23 is unsearchable and cannot be grouped as it is drawn to unknown and unspecified compounds.

The inventions listed as Groups I-CDL do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Each of the corresponding polynucleotides, polypeptides and antibodies are independent products, with different uses and being structurally, biochemically and biologically different products. Additional or alternate methods of use are claimed for individual polynucleotides and polypeptides. 37 CFR 1.475(b) does not provide for unity of invention of more than 1 product or more than one method of using a product as a combination of invention having unity of invention. However, with respect to groups drawn to independent polynucleotides or alternate methods of using same recited in the alternative, in accordance with 1192 O.G. 68 (19 November 1966) applicant is entitled to an initial search of inventions pertaining to the first ten independent polynucleotides recited, and may elect to pay an additional fee for each search of up to four additional independent polynucleotides. For additional method of using each of the independent polynucleotides, applicant may further elect to pay an additional fee for an additional search involving the first ten polynucleotides and each additional search involving up to four additional polynucleotides. With respect to groups pertaining to independent polypeptides or antibodies to the independent polypeptides, each product or method of use is an additional invention. An additional fee must be paid for each additional invention relating to polypeptides or antibodies against same. With respect to the relationship between the claimed polynucleotides and the claimed polypeptides, there is no one-to-one correspondence, i.e. no corresponding scope, between claims drawn to polynucleotides and their use and those drawn to polypeptides, antibodies and their use. Consequently, there is no special technical feature linking the polynucleotides and the polypeptides or antibodies claimed.